DOCUMENT RESUME

ED 400 684 FL 024 160

AUTHOR DeWispelaere, Christi; Kossack, Julie
TITLE Improving Student Higher Order Thinking Skills through the Use of Graphic Organizers.
PUB DATE 23 Apr 96
NOTE 159p.; Master's Thesis, Saint Xavier University.
PUB TYPE Dissertations/Theses - Masters Theses (042)

EDRS PRICE MF01/PC07 Plus Postage.
DESCRIPTORS *Audiovisual Aids; Classroom Techniques; Instructional Effectiveness; Instructional Materials; Program Descriptions; Secondary Education; Secondary School Students; Second Language Instruction; *Second Languages; Skill Development; *Spanish; *Thinking Skills
IDENTIFIERS *Graphic Organizers

ABSTRACT

A program designed to improve higher-order thinking skills in secondary school students of Spanish as a second language is reported. Deficiency in higher order thinking was documented through teacher-constructed tests, students' oral presentations in Spanish, teacher observation journals, and student reflection logs. Analysis showed the students lacked knowledge, practice, and transfer of higher order skills, regardless of the skills being taught in isolation or integrated into the curriculum. The intervention used in this project centered on use of graphic organizers, or mental maps presented in visual form that represent key skills such as sequencing, comparing and contrasting, and classifying. Appropriate graphic organizers were selected for the course content and used in instruction and testing, and students were provided with feedback. Students also developed their own graphic organizers and used them in new situations. Improvement in student performance was first noted in written quizzes and tests, and later in organization of student projects and improved student behavior. It is concluded that graphic organizers can be incorporated into second language instruction easily and effectively. Materials and supporting documentation are appended. Contains 31 references. (MSE)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

FL

ED 400 684

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL
HAS BEEN GRANTED BY

Christi DeWispelaer
Julie Kossack

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

IMPROVING STUDENT HIGHER ORDER THINKING SKILLS THROUGH THE USE OF GRAPHIC ORGANIZERS

by

Christi DeWispelaere
Julie Kossack

Submitted in partial fulfillment of the requirements for the degree of Master's of Art in Teaching and Leadership

Saint Xavier University & IRI/Skylight Field-Based Master's Program

Action Research Project
Site: Elk Grove Village, Illinois
Submitted: April 23, 1996

Christi DeWispelaere
Marian Central Catholic H.S.
Woodstock, Illinois
Julie Kossack
Margaret Mead Jr. High
Elk Grove Village, Illinois

FL024160

SIGNATURE PAGE

This project was approved by

Peter [illegible] MA MAT

Advisor

Mary Ellen Schueler MEd

Advisor

Terry Sterling Ph.D.

Dean, School of Education

Abstract

Authors: Christi DeWispelaere and Julie Kossack Site: Elk Grove Village, IL

Date: April 23, 1996

Title: Improving Higher Order Thinking Skills

This report describes a program for improving higher order thinking skills in secondary Spanish classrooms. The targeted population consisted of junior high and high school students in an upper middle class suburban community in the mid-west. The deficiency of higher order thinking was documented through teacher-constructed tests, authentic oral presentations in the target language, teacher observation journals and student reflection logs.

Analysis of the probable cause data revealed that students lacked knowledge, practice and transfer of higher order thinking skills regardless of the skills being taught in isolation or integrated into the curriculum. Standardized tests, textbook assessments and district and state mandated tests do not assess higher order thinking skills. Therefore, teachers do not teach them. Finally, those who need the skills most, for example, at-risk learners, are not taught them.

A review of solution strategies suggested by knowledgeable others, combined with an analysis of the problem setting, resulted in the selection of graphic organizers as the intervention to improve higher order thinking skills.

Post-intervention data indicated an increase in awareness, usage and transfer of higher order thinking skills.

TABLE OF CONTENTS

Page

Abstract i

Chapter

1 Problem Statement and Context 1

General Statement of Problem 1

Immediate Problem Context 1

Surrounding Community 5

Regional and National Context of Problem 7

2 Problem Definition 9

Evidence of Problem 9

Probable Causes of Problem 15

3 The Solution Strategy 22

Review of the Literature 22

Project Outcomes and Solution Components 28

Action Plan for the Intervention 29

Methods of Assessment 31

4 Project Results 32

Historical Descriptions of Intervention 32

Presentation and Analysis of Results 35

Conclusions and Recommendations 40

References Cited 44

Appendices 47

- Appendix A - Junior High Faculty Experience Survey 47
- Appendix B - High School Faculty Experience Survey 48
- Appendix C - Behavioral Checklist 50
- Appendix D - Review Tests 51
- Appendix E - Fogarty's Three-Story Intellect 64
- Appendix F - Raw Data of High School Review Test 65
- Appendix G - Raw Data of Junior High Review Test 66
- Appendix H - High School Oral Situations 73
- Appendix I - Junior High Oral Situations 74
- Appendix J - Oral Presentations Rubric 75
- Appendix K - Reflection Logs 77
- Appendix L - Higher Order Thinking Skills Survey and Results 79
- Appendix M - High School and Junior High Historical Lesson for the Day of the Dead 82
- Appendix N - Graphic Organizers 96
- Appendix O - Raw Data of High School Tests 111

Appendix P - Raw Data of Junior High Chapter 9 Quiz 112

Appendix Q - School Uniform Project Lesson Plan 113

Appendix R - Festival Poster Lesson Plan 116

Appendix S - Spanish Cartoon Project Lesson Plan 120

Appendix T - Identifying Details Lesson Plan 123

Appendix U - Stem-changing Verbs 125

Appendix V - Attribute Comparison Lesson Plan 127

Appendix W - The Verbs ser and estar Lesson Plan 129

Appendix X - Concept Map with Commands Lesson Plan 131

Appendix Y - Christmas in Mexico Lesson Plan 133

Chapter 1

PROBLEM STATEMENT AND CONTEXT

General Statement of Problem

Targeted junior high and high school Spanish students exhibit a deficiency in using higher order thinking skills. Evidence for existence of the problem includes teacher-made assessments, teacher observation and student self-evaluation.

Immediate Problem Context School A

The junior high school is located in an upper middle class suburban community in the mid-west. It is one of five junior highs in the school district. Total enrollment in 1993 was 763 students. Eighty four and one-third percent of the student population was White, 11.8 percent Asian/Pacific Islander, 2.6 percent Hispanic, and 1.3 percent Black. One percent of students were from families receiving public aid, living in institutions for rejected or delinquent children being supported in foster homes with public funds, or eligible to receive free of reduced-priced lunches. Four percent of students were limited-English-proficient and were eligible for bilingual education. Daily attendance was 96 percent, student mobility 6.3 percent, and chronic truancy .3 percent (two students). Ninety-six percent of parents/guardians made at least one contact with the students' teachers during the 1993-94 school year. (Annual Report, 1994).

During the 1993-94 school year 58 certificated staff and 14 support staff were employed at the school. Ninety eight percent of the district's teachers were

White, .8 percent Black, .8 percent Hispanic, .6 percent Asian/Pacific Islander and .1 percent Native American. The gender breakdown of the district was 15 percent male and 85 percent female (Annual Report, 1994). In comparison, the targeted school had a staff of 34 percent male and 66 percent female. Average teaching experience at the junior high was 19 years. Thirty-four percent of certified staff had Bachelor's degrees, 64 percent had Master's, and 2 percent had Doctorates (Appendix A).

Average teacher salary in the district for 1993-94 was $48,300. Effective 1991-92, salaries include various monetary benefits and compensation such as tax-sheltered annuities, retirement benefits, bonus and extracurricular duty payments. Average administrative salary was $80,687.

Average class size was 22.2 students. Operating expenditure per pupil for 1993-94 was $7,000. Time devoted to teaching the CORE subjects of Math, Social Studies and Science was 40 minutes each day; English, 80 minutes a day (Annual Report, 1994). In seventh grade, students may choose two of the following electives: Spanish or French I, Art/Music, Band, Orchestra, Chorus, or Study Hall. In eighth grade students may choose two of the following: Spanish or French I, Spanish or French II, Life Skills, Technology Education, Life Skills/Technology Education, Band, Chorus, Orchestra, Art, or Music.

The current Modern Language program consists of Spanish I and II; French I and II. Students meet five days a week; 40 minutes each class period. Two years of Modern Language at the junior high level is equivalent to one year of high school Modern Language. Students use Heinle and Heinle's outcome-based learning texts ¡Ya Verás! and On y Va! Level I functions include the following: meeting and greeting people, ordering something to eat or drink, discussing likes and dislikes, finding out about other people, identifying personal preferences, talking about family members, describing people and places, identifying places/buildings in a city/town, expressing desires and preferences, and talking about a person's age. Functions and novice-level grammar are carried out in a number of contextual settings: café, snack bar, restaurant, school, home, downtown and shopping mall. Level II functions concentrate on giving and asking directions, giving orders, suggesting activities, asking for and giving the time, discussing feelings, talking about the future, identifying what to do in town, giving directions for using the subway, buying tickets, taking a taxi, making plans for a trip, discussing various cultural aspects of the Hispanic world, and talking about events/activities in the past, present and future. Contexts include downtown, festival, subway station, travel agency, Mexico, Central and South America, the United States and Spain. Sixty three percent of seventh graders and 41 percent of eighth graders elected to take Spanish in 1994-95.

The Board of Education is currently studying the possibility of changing the junior high schools to the middle school model which would directly impact the present elective system, transitioning from full-year courses to nine week exploratory classes.

School B

The targeted High School was founded in 1959 and is a co-educational Roman Catholic High School. Seventeen Catholic parishes in the county contribute financial support to the school. The student body consisted of 564 students for the 1994-95 school year; 85 percent were Catholic and 15 percent were Non-Catholic. The students are graduates of the seven Catholic county junior highs, eighteen public junior highs, one Lutheran elementary school and one Montessori school. Ethnic groups included 95 percent White, 1.7 percent Hispanic, 1.5 percent Asian, .35 percent Native American and zero percent Black. One hundred percent of the students completed the A.C.T. for 1994. Of those students the composite score was 22.1 (Annual Report Card, 1994). General daily attendance was 94.7 percent with ten to fifteen tardies per day (D. Tremblay , Marian Central Catholic High School receptionist , personal communication, February 17, 1995).

During the 1994-95 school year, the Catholic high school employed 32 teachers and 20 support staff. Racial /ethnic background of the staff were unavailable due to protection rights of the Diocese of Rockford. Gender breakdown of the teachers and support staff was 57 percent female and 43 percent male. Average teaching experience was 13.2 years with a standard deviation of 7.5 years. Fifty percent of the teachers had Bachelor's degrees, 48 percent had Master's and two percent had Doctorates (Appendix B). Average teacher salary was $27,325 with monetary benefits for sponsoring co-curricular activities. Average administrative salary was not available.

Average class size at the high school for the 1994-95 school year was 26 students. Annual expenditure per student was $3,356. Annual parish assessment income was $1,355 per student in reference to tuition rates of $2,350 per first student of a family from a participating parish and $2,950 per first student of a family from a non-participating parish (Annual School Report Card, 1994). The school day was divided into seven 47-minute class periods. Students are required to complete 23 credits for graduation: four credits of English, two credits of Foreign Language, Art or Music, three credits of Mathematics, four credits of Religious Studies, one credit of Biology, .5 credits of Consumer Economics, .5 credits of Government, one credit of U.S. History and our credits of electives.

The foreign language curriculum offers four years of French and four years of Spanish. The philosophy of the foreign language department is to equip students with necessary skills to function in the target language and culture, to use the language for a lifetime of personal enjoyment and enrichment, to appreciate the role of Hispanic and French cultures in a global context and to continue expanding their communicative proficiency for further education or the workplace. The study of basic grammar and vocabulary of Spanish is the focal point of class sessions and they are centered around oral and written practice of the language elements and structures. Students practice the four skills of reading, writing, speaking and listening in daily lessons with text, workbook, audio tapes, daily participation, skits, quizzes and tests.

The Surrounding Community: Community A

The Community Consolidated School District is the largest elementary district in the state. The district has 22 elementary and 5 junior high schools serving seven suburban communities. Total enrollment as reported on September 30, 1993 was 15,730. Certified staff totaled 1,080; support staff 403. Employment categories indicate 26 central office administrators, 39 principals/assistant principals, 492 kindergarten to sixth grade classroom teachers, 160 junior high classroom teachers, 104 special education teachers, 150 special areas (psychologists, guidance, nurses, social workers, librarians, gifted, Title I), 109 special teachers (art, music, physical development), 110 teachers' aides, 62 12-month and 65 10-month secretaries/clerks, 31 maintenance and grounds, 87 custodians, 10 supervisors, and 32 tutors.

The junior high is located in a suburban area adjacent to a midwestern metropolis which is 10.9 square miles (residential 5.5 square miles; industrial 4.5 square miles) and had a population of 33,429 (Census, 1990). Total population breakdown showed 29,781 people were White, 2,242 Asian or Pacific Islander, 925 of Hispanic origin, 185 Black, 27 American Indian, and 269 other races.

Census reports for 1990 listed the median age of residents at 32.7 years; average persons per household 3.77. The median family income was $48, 863.

Over 3,500 firms, employing approximately 70,000 people and representing most nationally recognized firms, are located in a comprehensively planned and well maintained industrial park served by both rail and transport systems. Nine principal shopping centers and sixteen strip shopping centers are located in the Village.

Community support for the school district is strong in philosophy but weak in practice. The 1993 school referendum was voted down. The District's desire to switch its junior highs to the middle school model at a price tag of one and a half million dollars has caused debate among community members as to who will pay the bill. Voters in the village supported a county tax cap on the 1994 fall ballot. At present, local tax dollars account for 85 percent of the District's funding. To meet the financial challenge, cope with rising enrollment, and meet its goal of improved student performance, officials have had to dip into the District's cash reserves.

Community B

The Catholic High School is in a town located between two large cities in a midwestern area. It is affiliated with a Catholic Diocese and seventeen parishes in the county. The county consists of small suburbs and rural towns. As of 1990, the population was 183,241, including 95.7 percent White, 3.2 percent Hispanic, .69 percent Asian and Pacific Islander, .16 percent Black and .16 percent American Indian, Eskimo and Aleut.

Regarding population, in the county the average number of persons per household was 2.93 and the median household income was $46,369, according to the 1990 Census. The labor force, as of 1990, with 95,536 resident workers sixteen years of age and older, includes; 26.9 percent managerial-professional, 16.9 percent technical support and sales, 16.3 percent administrative and clerical, 9.0 percent service occupations, 2.0 percent farming, fishing and forestry, 14.9 percent precision production, craft and repair, 14.0 percent operators, fabricators and laborers, and 7.4 percent unemployed. (McHenry County Association of Chamber Executives, 1990)

Community support for schools is great in the area, in that the high school is currently in the process of expansion, supported by the Bishop of the Diocese, the 17 surrounding parishes and businesses and private donations in the county. The high school has added two permanent staff designated to monitor the capital campaign of the expansion plan for the school, scheduled to be completed by the Spring of 1996.

Regional and National Context of Problem

"In the past decade philosophers, psychologists and educational practitioners have all come to agree on the importance of effective thinking to success in school and in life" (Keefe, 1992, p. V). Time and time again claims have been made that American students cannot think effectively. According to Keefe, a variety of reports, books, and articles have been written supporting or describing programs about thinking. He further stated that many of these publications mention students' inability to perform complex academic tasks or to answer higher order questions (Keefe, 1992).

Researchers Brown and Campione (1991) support the need for students to learn how to formulate higher-level thinking strategies to promote learning how to learn. Letteri (1992) concurred, informing educators that current cognitive-based research demonstrates that one of the most important factors contributing to achievement differences is the profile of cognitive skills that a student brings to the cognitive tasks.

Although virtually everyone recognizes the need to promote higher order thinking skills, controversy exists as to who will benefit most from the teaching of these skills. On one hand, researchers feel that higher order thinking strategies should be directed to lower-level or at- risk learners. Perkins and Swartz (1992), who participated both in research and practical programs designed to help students think better, disagree. They believe that "all students can learn to think better than they do--including the gifted ones and also those who are slow learners or at-risk" (p. 53).

Controversy also exists concerning method of instruction. Marzano (1992) plotted the two methods of instruction on a continuum stating that, "at one end are approaches that teach thinking explicitly in a content-free environment. At the other end are approaches that embed skills within the teaching of content" (p. 17). Leaders in the thinking skills movement (Barell, Bellanca, Brandt, Costa, Feuerstein, Fogarty, Jones, Lipman, Marzano, McTighe, Palincsar, Perkins, Swartz) agree on the use of explicit skill instruction to promote thinking for all students. However, emphasis is placed on the inclusion of the implicit model to facilitate transfer for the learner (Beyer, 1987; Letteri, 1991; O'Reilly, 1985; Paul et al., 1987/1989).

As Elliot Merenbloom (1992) so poignantly declared, "thinking is a prerequisite for success in the learning process as well as in life itself" (p. 151).

Chapter 2

PROBLEM EVIDENCE AND PROBABLE CAUSE

Problem Evidence

In order to document the extent of insufficient higher order thinking skills anecdotal and charted records of behaviors. Also noted were results of a review test, oral review presentations and student reflections of the oral presentations.

Wasserman (1987) suggested the use of Raths' eight negative behaviors checklist to identify deficits in thinking. Rath (cited in Wasserman, 1987) stated that "certain behaviors of people reflect an incompleteness or inconsistency in thought. These behaviors reflect experience with thinking that has not been adequately rigorous [in terms of higher order functioning]." The eight behaviors are: impulsivity, overdependence, inability to connect means with ends, inability to conceptualize, occurrences of being dogmatic or close-minded, instances of being rigid and inflexible, underconfidence and anti-intellectual reactions. By monitoring the afore-mentioned behaviors, the teacher would be made aware of the existence of the deficiency of higher order thinking skills.

A modification of the behavioral checklist was developed by the researcher (Appendix C) to aid in the recording process. A summary of the number of incidents and behavior categories is presented in tables 1 and 2.

Table 1

Number and Categories of Behaviors at the Targeted High School

September 13 through September 20, 1995

Behavior	Number of Incidents
very impulsive	36
overdependent	7
cannot connect means with ends	7
miss the meaning	14
dogmatic, close-minded	6
rigid and inflexible	3
underconfident	9
anti-intellectual	3

Table 2

Number and Categories of Behaviors at the Targeted Junior High School

September 1 through September 12, 1995

Behavior	Number of Incidents
very impulsive	65
overdependent	69
cannot connect means with ends	72
miss the meaning	31
dogmatic, close-minded	28
rigid and inflexible	44
underconfident	105
anti-intellectual	25

When first viewing the tables it is apparent that there is a large variance in the number of reported incidents of the monitored behaviors. This variance may be due in part to the difference in maturity level of the two targeted groups. Although the behaviors of 46 students were monitored in table 1 and 71 students in table 2, quantity or rate of frequency should not be the primary focus in determining a deficit in higher order thinking skills. Rather, the mere fact that these incidents occurred should be sufficient evidence that students' current higher order thinking skills are inadequate.

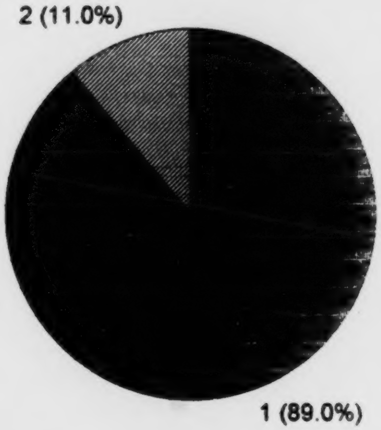
Teacher anecdotal notations regarding the behaviors further emphasized the correlation between the behaviors and a deficit in higher order thinking skills. For example, very impulsive students seemed to act "without thinking." They answered questions before complete instructions were verbalized or read. Students were impatient and completed activities merely to finish them. Overdependent pupils constantly relied on teacher support to complete any given task instead of alternative resources, i.e. textbook, vocabulary lists, notes, review sheets, etc.... Individuals who missed the meaning had difficulty comprehending. They needed frequent repetition of directions and made such statements as, "why are we reviewing anyway?" and "what does number two mean again?" Finally, underconfident students were hesitant in expressing their ideas for fear they might be wrong. In fact, silence was often the common response when thought provoking questions were asked.

To further evidence existence of the problem, researchers developed review tests (Appendix D) based on students' prior knowledge in the content area. The tests were designed to assess the lack of transfer of higher order thinking skills based on Fogarty's Three-Story Intellect (Appendix E). Figures 1 and 2 illustrate the results of the review tests.

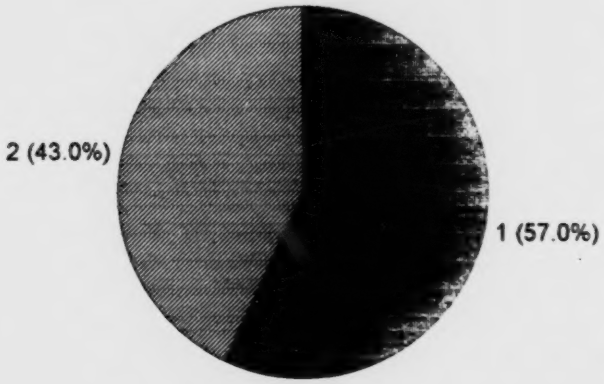
Figure 1

Targeted High School Review Test Results

Lower Level Thinking Skills



Higher Order Thinking Skills



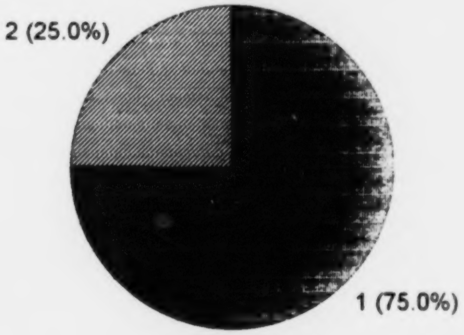
1 - students who performed at or above desired level of accuracy

2 - students who performed below desired level of accuracy

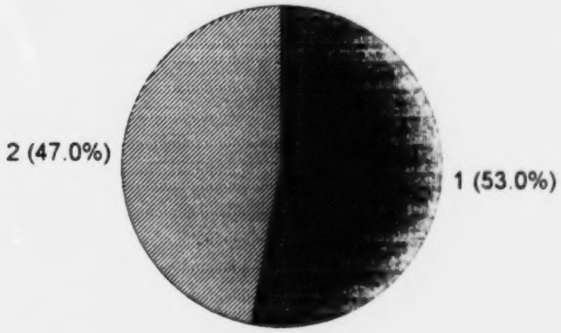
Figure 2

Targeted Junior High School Review Test Results

Lower Level Thinking Skills



Higher Order Thinking Skills



1 - students who performed at or above desired level of accuracy

2 - students who performed below desired level of accuracy

In order to understand the level of achievement attained on both tests, the desired level of accuracy must be defined. In Figure 1, the desired level of accuracy is 88%. That is to say, in order to assess if a student has mastered the content, he or she must obtain an 88% or higher on any type of assessment.

The same criteria applies to Figure 2. At the junior high level, mastery of material is achieved with a score of 85% or higher. In addition to assessing the test as a whole, it can be categorized in order to evaluate performance on a particular section. For example, vocabulary and basic grammar skills were evaluated through multiple-choice, matching and fill-in-the-blank test items. These items reflected low-level thinking skills, such as recall, selection, matching and naming. Examples of higher-level thinking skills included application of grammar concepts in authentic situations, interpretation of a reading selection and problem-solving in the target language. At both targeted sites, results indicated a high rate of success on test items that required lower-level skills. In comparison, test items that assessed higher-level skills fell well below the desired level of mastery, thus indicating a visible deficit in the ability to apply and transfer higher-order thinking skills.

Coupled with the review test, an oral review presentation was assigned, performed and evaluated to assess student application and transfer of previously learned material in the target language. Students at the high school level were asked to choose and prepare one of ten situations (Appendix H), while targeted junior high students selected one of four situations (Appendix I) to perform for oral assessment. Both levels were assessed according to guidelines on a teacher-designed rubric (Appendix J). Desired levels of mastery at the junior high and high school were 85% and 88%, respectively. While students at the high school did exceptionally well, 94% and above, scores at the junior high were significantly lower with only 49% scoring at 85% or higher. It can be concluded then that students at the targeted junior high exhibited an unacceptable level of application and transfer of previously acquired knowledge.

Yet another method of evidencing the existence of the problem was the written group processing (Appendix K) in reference to the oral review presentation. A deficiency in higher-order processing was apparent after analyzing and interpreting the group responses. On the whole, student responses were too general or vague. For example, when students were asked if they could connect the assignment to something they previously learned, many responded, "no," or correlations remained within the content area, rather than transferred to other curricula. Student responses were often unclear and imprecise: "We were supposed to do a skit on what we chose to do," "I was supposed to meet a friend at a café unexpectedly with another friend with me," "I was supposed to get to know him " and "I was supposed to study hard and prepare for the test." When students were given the opportunity to receive teacher clarification on any aspect of the review presentation, rather than asking about specific vocabulary or grammar concepts, students dwelled upon the letter grades: "What did we get?", "How will this affect my grade?" and "Do we get a grade for this?" In addition, student goals were too broad or unrealistic : "I want to speak Spanish fluently by the end of the year," "to do better at skits," "to get good grades, " "to memorize better " and "to improve on anything that needs to be improved." These examples sufficiently indicated the inability to transfer higher-order thinking skills to reflective situations.

Probable Causes

When searching for probable causes at the sites, School A's *Thinking Skills Strategic Plan* came under scrutiny. The goal of the targeted junior high's district "is to develop a paradigm of education which incorporates the belief that forms of thinking and attitudes of thoughtfulness can be nurtured and taught effectively to students through infusion into the existing curriculum" (Thinking Skills Strategic Plan, 1991). Beginning in 1993, when the plan was officially accepted by the Board of Education, the task timeline was followed with the establishment of a parent /staff/community committee to create a community education plan, a vehicle for collecting and disseminating current research on thinking skills was created, district-wide inservice for administration was devised and a format for identifying thinking skills in the current curriculum was developed. Unfortunately, with the retirement of the committee chair and numerous administrative turnovers the infusion of the strategic plan has been sporadic. Thinking skills representatives have not been identified and trained to act as thinking skills experts and liaisons at the junior high level. District-wide inservice support programs have not been provided and implementation of the Infusion Model by classroom teachers beginning in the Fall of 1995 is not occurring at the targeted junior high.

The site once again became the probable cause when a survey assessing teacher understanding and use of higher order thinking skills was distributed to certified staff at the targeted sites. The purpose of the survey was to determine the exact areas of strengths and weaknesses in regards to higher order thinking skills. With teacher weaknesses identified, a positive correlation between teacher attitudes and lack of student higher order thinking skills could be supported by the site as well as the professional literature (Inman & Marlow, 1992). Unfortunately, a correlation could not be made due to a returned and completed response of a mere 53%, keeping in mind that a 70% return is necessary to consider a survey valid. In addition, of the 75 surveys distributed, 29% were not returned at all, 13% were returned totally blank and 5% were returned incomplete (Appendix L). Even though the survey was considered invalid, it can be surmised that teachers felt some uneasiness about their understanding of the concept and therefore, did not complete or return the survey. On the other hand, the survey was voluntary and teachers may have been otherwise occupied.

The literature itself suggests several underlying causes for a deficiency in the use of higher order thinking skills in the classroom. According to Wasserman (1987), students are simply not taught higher order thinking skills. This was documented as early as 1966 by Rath, Wassermann, Jonas and Rothstein in *Teaching for Thinking: Theory and Application*. Rath asked hundreds of classroom teachers to describe students who had difficulty thinking for themselves. From these testimonials, Rath devised a checklist of eight observable behaviors, which teachers could use to detect inadequate thinkers. The eight observable behaviors included: impulsivity, overdependence, inability to connect means with ends, inability to conceptualize, occurrences of being dogmatic or close-minded, instances of being rigid and inflexible, underconfidence and anti-intellectual reactions. By keeping this checklist, Rath suggested that a high occurrence of said behaviors had a direct correlation to a deficiency of higher order thinking skills. He stated, "certain behaviors, seen persistently and in the extreme, may be a sign of pupils' inadequate opportunities to develop their higher-order mental functioning" (Wassermann, 1987, p. 462). That is to say that students have received insufficient instruction in the use and transfer of these skills. In addition, they have been allotted little or no time to reflect on their thinking.

So much of the knowledge which students possess is attained passively rather than actively. As Perkins and Swartz (1992, p. 56) observed, "people know about it, but don't do anything with it." While educators realize the importance of teaching students higher order thinking skills, all too often the skills are taught with no opportunities provided to maintain them. Lack of maintenance undoubtedly leads to extinction (Wassermann, 1987).

The deficiency in higher order thinking skills among students often reverts back to the teacher. In a four hour seminar designed to examine teacher attitudes and perceptions (Inman & Marlow, 1992), "both prior to and following the workshop, most participants indicated that higher order thinking skills had neither been adequately taught nor modeled during their teacher training" (p. 540). Not only do students lack the necessary tools to improve higher order thinking, but the teachers as well.

One reason why teachers may react ineffectively to students' needs is that they are uncomfortable incorporating new ideas into the existing curriculum. Sternberg stated that "teachers often lack the openness and receptivity of the students. They are less willing to shake free of traces of their own expertise" (1987, p. 457). Often teachers are leery of implementing strategies with which they have had little or no experience to determine success. Teacher discomfort is further witnessed in the individual's hesitancy to give up classroom control by asking more probing, controversial questions rather than the typical one-dimensional variety. Unfortunately, teachers are often slow to commit due to existing responsibilities.

The lack of commitment is often coupled with a lack of time. Teachers need time to prepare, develop and reflect on higher order thinking skills programs (Inman & Marlow, 1992; Shepard, 1995; Wright, 1995). An already conscientious teacher may feel he or she does not have the appropriate amount of time needed to master the higher order thinking skills concept. Parallel to the time factor, Wright (1995) alerted teachers to the vast amount of literature in regards to critical thinking and the many opportunities that exist to learn about it. However, teaching critical thinking requires careful thought which equates to time.

Although teachers may have the time, the desired support is often insufficient. Wassermann stated it well when she said, "In some schools, administrators are unsympathetic to and unsupportive of teaching strategies that would cultivate pupils as thinkers" (1987, p.465). In addition to administrative support, teachers require support from experts in the field and inservice workshops and other professional development experiences that emphasize the importance of long-term study and in-classroom support of higher order thinking skills.

Referring back to Inman and Marlow's attitude survey (1992), on a scale of one (strongly disagree) to five (strongly agree), teachers rated the importance of integrating HOTS into the curriculum at 3.85. It is unfortunate, and Olsen agreed, that "it is simply not possible to incorporate thinking into a curriculum that has so much content that it can be covered only in a cursory fashion" (1995, p.133). Current classroom materials do not lend themselves to the promotion of higher order thinking skills. In fact, they work against it (Shepard, 1995; Wassermann, 1987). Too often, the textbook drives the curriculum (Darling-Hammond, 1994). The teacher becomes obsessed with finishing the textbook, thus leaving little time for depth and thinking (Hursh, 1994; Thornton, 1988, cited in Olsen, 1995).

The blame should not focus solely on teachers and students. Much of the responsibility lies with testing procedures. The most commonly used standardized and teacher-developed tests often only assess low level thinking skills such as recall, matching, naming and selecting. Darling-Hammond emphasized that "since about 1970, when standardized tests began to be used for a wider variety of accountability purposes, basic skills tests scores have been increasing slightly, while assessments of higher order thinking skills have declined in virtually all subject areas" (1994, p.16). Since meaningful thinking and reasoning are absent in such tests, current teaching practices do not enforce quality thinking, but rather rote-learning (Klopfer & Resnick, 1989).

Who should be taught? A great deal of controversy exists as to who will benefit most from the teaching of higher order thinking skills. On one hand, researchers feel that higher order thinking strategies should be directed at lower-level or at-risk learners. On the other hand, researchers such as Sternberg (1987) declared that everyone should receive instruction. "No matter how well they think, everyone can stand improvement and everyone can improve" (p. 459).

Finally, societal beliefs should be taken into account as a probable cause. The political climate between the school and the community at times influences the support of an educational movement (Wright, 1995). The world beyond the classroom with its competitive nature, rewards the reflexive rather than the reflective thinker (Perkins & Swartz, 1992). Sternberg concurred, "In our society, we tend to value most those individual efforts that yield concrete, written product. This value system does not provide the best or most comprehensive approach to the teaching of critical thinking skills" (1987, p. 459).

1. Students lack skills or strategies to use higher order thinking skills.
2. Higher order thinking skills are not taught.
3. Teachers are unfamiliar with higher order thinking skills and do not feel familiar or comfortable teaching them.
4. The curriculum does not promote the use of higher order thinking skills.
5. Higher order thinking skills are taught in isolation; not integrated into the curriculum.
6. There is no transfer of skills from one curricular area to another nor to real-life situations.
7. There is no metacognitive reflection when using higher order thinking skills, therefore transfer does not occur.

8. Higher order thinking skills are not practiced.
9. Higher order thinking skills should be taught to all levels of learners. (For example: not just at-risk learner)
10. More passive instead of active learning occurs in the classroom.
11. Students are not held accountable for transfer of higher order thinking skills.
12. There is an inconsistency in student usage of higher order thinking skills.
13. Inadequate time is given to students to develop these skills.
14. Standardized tests, textbook assessments and district mandated tests do not assess HOTS, therefore teachers do not use them.
15. Insufficient follow-up strategies for targeted junior high's thinking skills strategic plan.

Chapter 3

THE SOLUTION STRATEGY

Review of the Literature

Where should one begin when devising strategies to improve higher order thinking skills? Who is the learner? Who is the teacher? In reality, the teacher must be the first learner and become comfortable with this role. Researchers themselves lean toward educating teachers as the first step to incorporating thinking skills into the classroom (Allen, 1993; Fogarty & McTighe, 1993; Inman & Marlow, 1992; Perkins & Swartz, 1992; Sternberg, 1987; Wasserman, 1987; Wright, 1995). Since it is the teacher's responsibility to be able to plan, instruct and assess higher order thinking skills, time must be devoted to teacher training. According to Wasserman (1987, p. 465), "training must be extensive, sensitive to teachers' emotional well-being and effective in counteracting deeply entrenched teaching practices."

A four hour workshop conducted by Inman and Marlow (1992) with 100 K - 12 teachers from urban and rural elementary, middle and high schools showed the necessity of teacher training to build confidence and knowledge of higher order thinking skills before implementation in the classroom. A survey conducted prior to the workshop evidenced low confidence and a lack of knowledge in regards to proper implementation of higher order thinking skills in the classroom. During the workshop, higher order thinking skills were defined and teachers were given the opportunity to strengthen and develop their abilities to plan, instruct and assess higher order thinking skills activities with their students. The post-workshop survey indicated an "increase in understanding of higher order thinking skills...(and) confidence in their performance, preparedness and abilty to teach these skills. The workshop activities encouraged the use ofthinking skills in the classroom environment" (Inman & Marlow, 1992, p. 540).

Although Inman and Marlow offered a workshop on higher order thinking skills as a viable solution for improvement, Perkins and Swartz (1992) cautioned that a single workshop is not a "quick fix" to infusing higher order thinking skills into content area instruction. A commitment on the part of both instructors and schools needs to be established and followed in order to successfully embed challenging thinking strategies into the existing curriculum.

Once teacher competency is reached, a suitable program should be chosen to meet one's needs. Sternberg (1987) suggests that clear-cut goals should be determined before choosing a program. When specific goals have been established, the teacher should research possible programs and tailor one to his or her needs. At this point, the teacher must design, implement and provide activities that contribute to growth in thinking (Wasserman, 1987). It is essential that a conducive classroom atmosphere is created; one that allows the teacher to be comfortable teaching and learning critical thinking skills with his or her students (Sternberg, 1987).

Developing an appropriate program and creating an atmosphere conducive to improving higher order thinking skills are not the only aspects to take into consideration. According to Fogarty's Three-Story Intellect (Appendix E), it must also be noted that although the end goal is to promote thinking at the highest level, activities must focus on skills appropriate to the students' current cognitive level. For example, Downey and Levstik (1988) agreed that "teachers should design lessons for younger students that use concrete operational thinking, but are sufficiently challenging to help prepare them for higher levels of thought" (p.338). Teachers at the middle school can maintain and enhance growth not only by providing opportunities for students to become independent thinkers, but also by challenging them to take ownership of their thinking (Lines, 1994). At the secondary level and beyond, research by Hennings and Watson (cited in Inman & Marlow, 1992) and Wasserman (1987) indicated teachers who used thought-provoking questions and activities witnessed a heightened level of comprehension, self-motivation and intellectual behaviors among students.

Contrary to beliefs stating that thinking skills should be taught in a content-free environment (Marzano, 1992), researchers such as Beyer (1988), Olsen (1995), Perkins and Swartz (1992) and Wasserman (1987) argued that higher order thinking skills are most effectively developed when directly incorporated into content area instruction. Successful infusion of higher order thinking skills requires a reduction of or flexibility within course content . Once course content has been sufficiently reduced, "attention to thinking in content instruction needs to be fairly frequent to (a) build students' skills and insights and (b) systematically deepen content understanding" (Perkins & Swartz, 1992, p.67). Although comprehension and implementation of the higher order thinking skills may seem overwhelming, it may be helpful to refer to Rath's words of wisdom (cited in Wasserman, 1987, p. 463) that higher order thinking skills "can occur within any prescribed curriculum, and it can occur at every level at the educational experience".

In order to ensure transfer, a variety of situations should be provided in which students can practice higher order thinking skills. Edelman, Hudgins and Sybil (1988) suggested cooperative groups as a vehicle for promoting student usage of higher order thinking skills. As students participate in cooperative groups, "they listen to their classmates describing their mental processes, they develop flexibility of thought and an appreciation for the different ways of solving the same problem " (Wilen, 1995, p.137).

As students incorporate higher order thinking skills into their learning repertoire, transfer to more authentic situations should occur. The number and variety of practice tasks that can occur in the content area are innumerable. "Students can summarize news reports, historical events, films; they can classify vocabulary words... the way a musical instrument is played, the behavior of an animal"(Wasserman, 1987, p. 463). In agreement with Wasserman, Levy (1991), McGinley, Pearson and Valencia (1990) suggested a variety of practice tasks and emphasized the need for such tasks to have genuine purposes and relate to daily life.

In recent years, there has been a surge in the metacognitive movement. To many it is no longer sufficient to concentrate solely on teaching higher order thinking skills, but also to encourage thinking about thinking. Allen (1993), Perkins and Swartz (1992) and Wilen (1995) encouraged metacognition (self-assessment) as a means to promoting intellectual growth. Such self-assessment can occur through reflective logs or journals. Logs and journals allow the learner to reflect upon what he or she has learned, as well as his or her strengths and weaknesses. Cooperative group processing and other reflective assignments further push students to explain their thinking (Sugarman, 1993).

Although cooperative learning facilitates the thinking process, there are many tools needed to understand, improve and actually apply thinking skills. One such tool is the graphic organizer. According to Burke (1994), "graphic organizers are mental maps that represent key skills like sequencing, comparing and contrasting, and classifying (in order to) involve students in active thinking" (p. 118).

Perkins and Swartz provided a similar definition adding the idea that graphic organizers should be used as tools to reorganize and advance the thought process (1992). What are the effects of these tools?

1. Represent abstract or implicit information in a more concrete form,
2. depict relationships between facts and concepts,
3. generate and organize ideas for writing,
4. relate new information to prior knowledge,
5. store and retrieve information, and
6. assess student thinking and learning

(Lyman & McTighe, 1992, p. 81).

Examples of graphic organizers include: Venn Diagrams, PMI Charts, Gathering Grids, Concept Maps, Webs, KWL Charts and Question Matrixes (Appendix M). It has been acknowledged that students should be taught and given the opportunity to use a variety of graphic organizers daily. This assortment of graphic organizers provides opportunities to address specific thinking skills (Burke, 1994). It should be noted that to truly cultivate student learning, teachers must incorporate new and previously practiced graphic organizers.

Black and Black (1990), Fogarty and McTighe (1993) and Fleschner and Rafferty (1993) believed that graphic organizers make the invisible visible. They aid in student generation and organization of ideas and information. In addition, concepts become clearer, students' test anxiety is lessened and transfer of thinking skills to other lessons with the same relationships occurs. "More importantly, they allow students the opportunity to show what they know or what they don't know which in turn assists the teacher in determining additional instructional interventions" (Fogarty and McTighe, 1993, p. 162).

A positive effect of the use of graphic organizers, noted by Perkins and Swartz (1992), is a sense of empowerment felt by the learner. This empowerment encourages the student to use more mindful thinking practices in diverse settings. In a study conducted by Bean, Frazee, Singer and Sorter (1986), a select group of students in a tenth-grade world history course compared the use of graphic organizers to traditional outlining techniques. Of the two strategies employed, students who used graphic organizers "displayed significantly more positive attitudes toward the strategy they were taught than students in the outlining group " (p. 162-163).

For many years, educators have focused on methods of improving student conceptualization and retention of information. Burke summed it up well when she stated, "Many students cannot connect or relate new information to prior knowledge because they have trouble remembering things. Graphic organizers can help them remember because they become 'blueprints' or maps that make abstract ideas more visible and concrete" (1994, p. 118). Fleschner and Rafferty (1993) also viewed graphic organizers as a method of assisting students in conceptualizing and retaining information. For example, when planning a lesson using a concept map, the teacher is encouraged to prepare thoroughly in order to successfully infuse higher order thinking skills into the content area and achieve meaningful outcomes. Fleschner and Rafferty emphasized that "since mapping promotes meaningful learning rather than rote learning, the information will likely be retained longer" (1993, p. 29).

Successful retention of information enhances student transfer of knowledge and higher order thinking skills. A graphic organizer promotes the transfer of knowledge and higher order thinking skills when adequate time is provided to learn and manipulate the organizer in a complex situation (Bean et al., 1986). The graphic organizer provides a reservoir where previous knowledge can be stored, retrieved and applied to new situations. Transfer should not only occur in the classroom. Rather, it is introduced and nurtured there in hopes that it will mature and continue in situations beyond the realms of the classroom.

Project Outcomes and Solution Components

As a result of using graphic organizers, during the period of October 1995 to December 1995, the targeted junior high and high school students will exhibit an increased knowledge, usage and transfer of higher order thinking skills as measured by teacher-constructed tests, project based assessments, teacher observation journals and student reflection logs.

In order to accomplish the terminal objective, the following processes are necessary.

1. Problem areas will be defined in preliminary instruction.
2. The terms "higher order thinking skills" and "graphic organizer" will be defined.
3. Current curriculum will be reviewed and graphic organizers that focus on higher order thinking skills within the content area will be chosen.
4. The use of graphic organizers will be explained and modeled by the teacher.
5. Students will practice using graphic organizers with teacher guidance.
6. Students will be given feedback.
7. Students will practice with previously learned graphic organizers.
8. Students will generate their own graphic organizers and implement them into novel situations.

Action Plan for the Intervention

I. Preparing the classroom
  A. Design bulletin boards to reflect
    1. cooperative learning
    2. higher order thinking skills
    3. graphic organizers
    4. three-story intellect
  B. Designate an area to store materials
    1. student reflection journals/portfolios
    2. materials for cooperative activities
      a. pens, pencils, markers, crayons, colored pencils
      b. dry erase markers and boards
      c. paper, poster board
      d. rulers
      e. scissors
      f. tape, glue sticks
      g. multi-media materials
        1) audiorecorder
        2) videotapes and video camera
        3) overhead projector and transparencies

II. Preliminary Instruction
  A. Review previous year information
    1. vocabulary
    2. culture
    3. grammar
  B. Review test
    1. Administer test

      2. Evaluate test and concentrate on abilities according to the three-story intellect
      3. Discuss results with students and give feedback
   - C. Oral presentation in the target language
      1. Model situation
      2. Students practice situation
      3. Students perform situation for teacher and peers
      4. Teacher evaluates performance and provides feedback

III. Establish cooperative learning groups
   - A. Form base groups of three or four
   - B. Heterogeneous groups will be teacher-selected based on the following
      1. gender
      2. academic ability derived from review test and oral presentations scores
   - C. Purposes of the groups will be
      1. to facilitate the teaching of graphic organizers
      2. to practice organizers in the content setting
      3. to generate original graphic organizers for project assessments
      4. to provide peer encouragement and support when using graphic organizers

IV. Introducing graphic organizers
   - A. Busca a una Persona (People Search)
      1. Students complete search
      2. As a class discuss approaches needed to complete the search
      3. Teacher identifies the people search as a matrix
   - B. Implement a variety of graphic organizers into weekly lesson plan
      1. Model graphic organizer in a familiar context

    2. Identify higher order thinking skill with which the graphic organizer coincides
    3. Students practice individually, with partners or in cooperative groups
    4. Students reflect on the use of the graphic organizer in reflection logs

V. Assessment of graphic organizers will occur through
  A. teacher-constructed tests (which use at least one graphic organizer as a form of assessment)
  B. project-based presentations with at least one original graphic organizer
  C. performance-based presentations where at least one graphic organizer is used to facilitate the performance or aid in the completion of said performance
  D. student reflection logs
  E. teacher reflection journals
  F. recycling of previously used graphic organizers into daily lessons

VI. Process of incorporation of graphic organizers continues according to daily lesson plan

Methods of Assessment

In order to assess the effects of the intervention, tests covering the content with the incorporation of graphic organizers will be developed. In addition, project-based assessment using graphic organizers and appropriate scoring rubrics will be constructed. Individual (student) and cooperative group reflection logs and teacher observation journals will be kept throughout the intervention period and will be considered as part of the assessment process.

Chapter 4

PROJECT RESULTS

Historical Description of Intervention

The objective of this project was to increase knowledge, usage and transfer of higher order thinking skills among the targeted junior high and high school students. The implementation of graphic organizers was selected to obtain the desired results.

To initially heighten student awareness, bulletin boards were designed depicting specific graphic organizers and higher order thinking skills. Cooperative groups were also formed to facilitate teaching and practicing of graphic organizers, to generate original graphic organizers, to enable peer encouragement and to provide opportunities for reflection and group processing.

A lesson conducive to both the targeted junior high and high school was the Day of the Dead research project. The Day of the Dead, celebrated on November 1 and 2, coincides with the Catholic holidays of All Souls and All Saints Days. On these days, people who have lost loved ones celebrate the memories of the deceased by constructing altars, known as *Ofrendas*. On the *Ofrenda*, objects are placed which represent the deceased's favorite foods and habits. One will also see candles, incense, flowers and *pan de los muertos* (a special holiday bread) that are said to guide the deceased's spirit to earth to visit with their loved ones. The five-day lesson was as follows.

Day 1

1. Watch *El día de los muertos* video or read articles on the Day of the Dead.
2. In cooperative base groups use a Venn diagram to compare and contrast Halloween and the Day of the Dead.

3. Use reflog 2 to process in cooperative groups.
4. Have students read article on *Ofrendas* and answer questions for homework.

Day 2

1. In cooperative base groups, share answers from homework.
2. As a class, discuss attributes of an *Ofrenda*.
3. Show and discuss teacher's model of *Ofrenda* (Roberto Clemente).
4. Pass out attribute sheet, references cited list and rubric to cooperative base groups. Discuss.
5. Assign groups historical figures.
6. Remainder of period will be spent researching figures in the library.
7. Homework: Bring materials needed for assembly of *altares* (i.e. magazines, markers, objects).

Day 3

1. Finish research in the library if necessary.
2. Work in cooperative base groups on assembly of *altares*.

Day 4

1. Finish working on *altares*.
2. Complete references cited sheet.
3. Homework: Using an original graphic organizer, compare and contrast the Day of the Dead with ways in which we, as individuals, remember those who have died.

Day 5

1. In cooperative base groups, discuss homework and choose one original graphic organizer that best represents the feelings or opinions of your group.
2. Set up *altares* for teacher, base group and outside group evaluations.
3. Return to cooperative base groups for processing.
4. Complete individual reflection question: If you had to pay homage to a deceased loved one, explain what you would do and why? (Appendix M)

In order to select appropriate graphic organizers, the current curriculum was reviewed. Organizers were chosen to meet the specific demands of vocabulary, grammar and culture, and were infused into daily lessons, quizzes, tests or projects. Those chosen were the Matrix, the Concept Map, the Web Diagram, the Question Matrix, the Arch Diagram, the Venn Diagram, the Right Angle, the Gathering Grid, the PMI Chart, the Decision Maker's Flow Chart, the Frame, the Verb Grid, the Invent Your Own and the KWL Chart (Appendix N). Each graphic organizer focused on one or more higher order thinking skill based on Fogarty's Three-Story Intellect (Appendix E). For example, the Venn Diagram is most effectively used to compare and contrast. As a preparatory exercise, students were asked to define the words "compare" and "contrast". Next, the teacher modeled the Venn Diagram with the students in a familiar context such as definite and indefinite articles. Students then practiced individually or within a group. From here, students were requested to apply this tool within a new context. Finally, students reflected on their knowledge and possible further application of the Venn Diagram. The chosen graphic organizers placed an emphasis on the higher order thinking skills of classification, analysis, inference, association of ideas, evaluation, sequencing, perception of time-sequenced relationships, generation of alternatives, reasoning, imagining and application. As graphic organizers were implemented into future lessons similar steps were taken to ensure increased knowledge, usage and transfer of higher order thinking skills.

Presentation and Analysis of Results

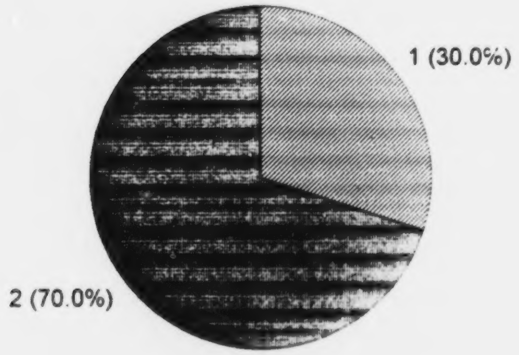
In order to determine if graphic organizers increased higher order thinking skills, a variety of assessment techniques were utilized. As one means of assessment, graphic organizers were incorporated into chapter quizzes and tests.

Figure 3

Targeted High School Tests Incorporating Graphic Organizers to Assess Higher Order Thinking Skills

Appendix O

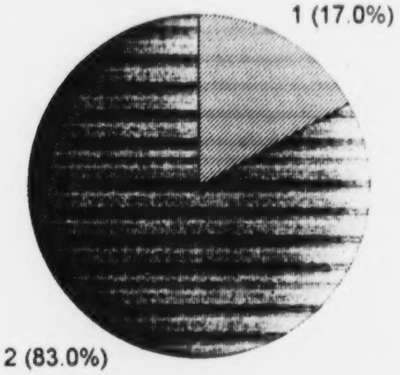
Chapter 2



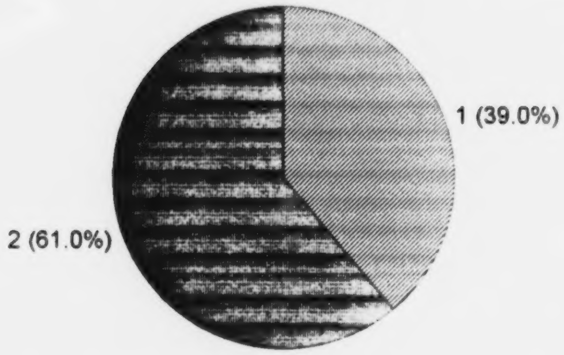
1 - students who performed below desired level of accuracy

2 - students who performed at or above desired level of accuracy

Quarter 1 Exam



Semester 1 Exam



1 - students who performed below desired level of accuracy

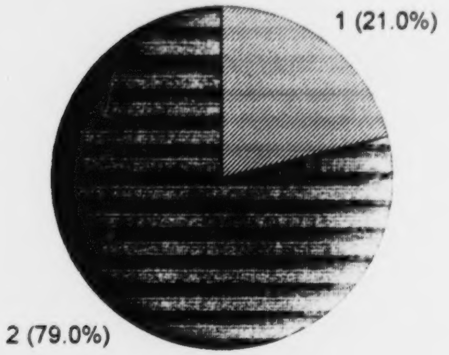
2 - students who performed at or above desired level of accuracy

Figure 4

Targeted Junior High School Quiz Incorporating Graphic Organizers to Assess Higher Order Thinking Skills

Appendix P

Chapter 9 Quiz



1 - students who performed below desired level of accuracy

2 - students who performed at or above desired level of accuracy

All three tests in Figure 3 indicated an increased level of accuracy compared to the targeted high school review test results in Figure 1, keeping in mind that the desired level of accuracy is 88 percent. Similar results occurred at the targeted junior high. The percentage of students who scored at the desired level of accuracy increased by 26 percent from the review test to the Chapter 9 quiz as seen in Figure 4.

In addition to written tests, projects employing graphic organizers were utilized to develop students' higher order thinking skills. At both the targeted high school and junior high, in the Day of the Dead research project, the Venn Diagram and the Matrix were the highlighted graphic organizers. The teachers determined the success of the utilization of the Venn Diagram and the Matrix as methods of transferring knowledge through the culminating activity-- the "altar".

The "altar" was a three-dimensional structure upon which objects representing deceased Hispanic historical figures were affixed.

Table 3

Day of the Dead Research Project Scores

Cooperative Groups	Grade of "A"	Grade of "B"
Targeted High School	7	1
Targeted Junior High	6	3

Table 4

Day of the Dead Individual Reflection Scores

School	Little evidence of thoughtfulness	Some evidence of thoughtfulness	Strong evidence of thoughtfulness
Targeted High School	0	6	17
Targeted Junior High	1	5	21

According to Table 3, all cooperative groups at the targeted high school and junior high performed at or above the desired level of accuracy. Further assessment of transfer in the Day of the Dead project was observed by teachers in the form of student metacognitive activities. To assess the higher order thinking skills of application and evaluation, students were asked to respond to the Day of the Dead individual reflection question, "If you had to pay homage to a deceased loved one, explain what you would do and why?" By examining

Table 4, it appears that students successfully demonstrated the higher order thinking skills of application and evaluation. Eighty-eight percent of the students at the targeted high school and 78 percent at the targeted junior high demonstrated strong evidence of thoughtfulness.

Three other projects, one at the targeted high school and two at the targeted junior high produced similar results. At the targeted high school, the secondary project utilized the Invent Your Own Graphic Organizer to design a new school uniform (Appendix Q). Noted student behavior included flexibility in thought, less dogmatic tendencies and an emphasis on creativity. An individual student reflection log was included in the project. In general, students displayed an increased depth of thought in their responses. However, when asked to predict a future application of the content and the Invent Your Own Organizer, answers remained vague.

At the targeted junior high, the use of the Decision Maker's Flow Chart to produce a festival poster yielded mixed results (Appendix R). During teacher modeling of the new graphic organizer, students persisted with inflexible, dogmatic, close-minded, impulsive, overdependent and anti-intellectual behaviors. As the activity progressed and the students became more familiar with the organizer, the negative behaviors decreased. Students were noticeably less dependent on the teacher for guidance and took it upon themselves to seek group consensus, distributed tasks, encouraged one another and displayed uninhibited creativity when designing their posters.

A mirror image of observations occurred during the initial stages of the targeted junior high students' Spanish cartoon project (Appendix S). While using the Frame as a graphic organizer, negative behaviors prevailed as in the aforementioned activity. However, as the project neared its completion and the Frame had been practiced sufficiently, students were observed using the higher order thinking skills of imagining, predicting, sequencing and applying. Also noted were open-mindedness and flexibility in thinking via increased risk-taking.

Daily lessons at the targeted high school caused similar patterns of reactions to use of graphic organizers. With the Arch Diagram, after the teacher modeled it in a familiar context, students brainstormed ways to utilize the new graphic organizer with a previously-read story (Appendix T). After redefining the elements of the diagram, students were able to dissect the story with relative flexibility. In another lesson, students used the Gathering Grid to conjugate stem-changing verbs and 100 percent of the students completed the grid with few grammatical errors and little re-modeling of the organizer (Appendix U). A final daily lesson at the high school was the Right Angle, used to analyze a story in their reader (Appendix V). Documented observations listed difficulties in analyzing a story character's personality and comparing it to his or her own personality.

At the targeted junior high, the incorporation of the Question Matrix with the verbs ser and estar (Appendix W) produced a higher tendency of correct usage in both oral and written situations. A similar increase was noted when students used a Concept Map to organize verb command forms (Appendix X). A third organizer, the Venn Diagram, allowed students to achieve an improved cultural awareness of Christmas in Mexico as compared to Christmas in the United States (Appendix Y).

Conclusions and Recommendations

Based on the presentation and analysis of the graphic organizers implemented to improve higher order thinking skills, improvement was first noted on written quizzes and tests. This increase was evidenced not only by the percentage of students who achieved the desired level of accuracy, but by students' perceptions of the benefits of graphic organizers. For instance, common responses included "it was a very easy way to organizer my thoughts", "it made the information clearer", "it helped me to use the information on another part of the test", "it was an easier way to show what I know" and "I like it because it's different!"

In regards to the projects, a higher level of accuracy was attained compared to past projects. This was due to the incorporation of the Venn Diagram and the Matrix. Teacher observations supported this assumption. Observations on the Venn Diagram included numerous and varied comparisons between the Day of the Dead and Halloween, innovative adaptations of the Venn Diagram's shape and adeptness at using the organizer. Referring to the Matrix, students initially demonstrated hesitance and reliance upon the teacher model. Through the course of the project, students gained an understanding of the Matrix model by fulfilling the Matrix criteria on the project rubric and by the quantity and quality of the representational objects on the "altar".

The inclusion of the graphic organizers in the remaining projects and daily lessons caused a decrease in the negative behaviors of impulsivity, overdependence, inability to connect means with ends, inability to derive meaning and tendencies of being dogmatic, close-minded, rigid and inflexible, underconfident and anti-intellectual. According to Wasserman (1987), a decrease in negative behaviors means an increase in the application of higher order thinking skills. Teachers also noted that persistent modeling and practice of the graphic organizers ensured the application and transfer of higher order thinking skills within the content.

After analyzing the data, it was apparent that graphic organizers assisted in improving higher order thinking skills. In order to truly improve higher order thinking skills through graphic organizers, a rigorous action plan must be followed. It is recommended that ample time be spent choosing graphic organizers specific to the higher order thinking skills that one wishes to develop. Sufficient time should be spent modeling and practicing each selected organizer with a continued emphasis on the chosen higher order thinking skill. The action researchers wish to emphasize the importance of keeping a behavioral checklist and teacher reflection journal throughout the intervention to ensure concrete data collection. Students should also be required to maintain a reflection journal to document personal growth and understanding of graphic organizers and higher order thinking skills. It is important to keep in mind that a student's chronological age and level of maturity may greatly influence his or her level of acquisition. Above all, one should not be discouraged if improvement is not always easily attained or evidenced.

The researchers highly recommend the incorporation of graphic organizers into the foreign language curriculum. In this study, graphic organizers were easily adapted to vocabulary, grammar and cultural concepts within the existing curriculum. It seems as if graphic organizers were specifically designed to facilitate the teaching of foreign languages! The researchers and the students realized the need to be committed to the organizers from the start in order to successfully manipulate them and improve their higher order thinking skills. The concreteness of the organizers allowed for easier lesson preparation and evaluation of student knowledge. It enabled the teachers to visual long-term goals rather than day to day progress. The researchers noted a rejuvenation of ideas, teaching strategies and student-teacher interactions which will encourage them to invariably use the Action Research Model. Finally, when one encounters discouragement, call upon Oliver Wendell Holmes' words of encouragement, "There are one-story intellects, two-story intellects and three-story intellects with skylights. All fact collectors who have no aim beyond the facts are one-story men. Two-story men compare, reason, generalize, using the labor of fact collectors as their own. Three-story men idealize, imagine, predict--their best illumination, comes from above the skylight." Reach for the skylight!

REFERENCES CITED

Allen, B. A., & Armour-Thomas. (1993). How do teachers teach for the promotion of student thinking and learning? Educational Horizons, 203-208.

Bean, T. W., Singer, H., Sorter, J., & Frazee, C. (1986). The effect of metacognitive instruction in outlining and graphic organizer construction on students' comprehension in a tenth-grade history class. Journal of Reading Behavior , 8, 53-169.

Beyer, B.K., Developing a thinking skills program. Boston: Allyn & Bacon, 1988.

Black, H. & Black S. (1990). Organizing thinking, book II. Pacific Grove, CA: Critical Thinking Press and Software.

Brown, A.L. & Campione, J.C. (1992). Students as researchers and teachers. In J.W. Keefe & H.J. Walberg (Eds.). Teaching for Thinking (pp. 49-57). Reston,VA: National Association of Secondary Principals.

Burke, K. (1994). The mindful school: How to assess authentic learning. Palatine, IL: IRI/Skylight.

Census of Population and Housing, Summary Tape Files 1 and 3. (1990). Washington D.C.: U.S. Government Printing Office.

Darling-Hammond, L. (1994). Setting standards for students: The case for authentic assessment. The Educational Forum, 59, 14-20.

Downey, M.T. & Levstik, L. (1988). Teaching and learning history: The research base. Social Education, 52, 336-342.

Edelman, S. & Hudgins, B. (1988). Children's self-directed critical thinking. Journal of Educational Research, 81, 262-273.

Fleschner, L. & Rafferty, C. (1993). Concept mapping: A visible alternative to objective and essay exams. Reading Research and Instruction, 32, 25-34.

Fogarty, R. & McTighe, J. (1993). Educating teachers for higher order thinking: The three-story intellect. Theory into Practice, 32, 161-167.

Inman, D. & Marlow, L. (1992). Higher order thinking skills: Teachers' perceptions. Education,112, 538-541.

Letteri, C.A. (1992). Diagnosing and augmenting basic cognitive skills. In J.W. Keefe & H.J. Walberg (Eds.). Teaching for thinking (pp.59-71). Reston, VA: National Association of Secondary School Principals.

Levy, T. (1991). Social Studies Instruction: Connecting Students and their society. Schools in the Middle, 1, 7-9.

Lines, C. (1994). Authentic assessment at the middle level. Middle School Journal, 39-41.

Keefe, J.W. (1992). Teaching for thinking. Reston, VA: National Association of Secondary School Principals.

Klopfer, L. & Resnick, L. (1989). Toward the thinking curriculum: An overview. Toward the curriculum: Current cognitive research. Alexandria, VA: Association for Supervision & Curriculum Development.

Lyman, F.T. & McTighe, J. (1992). Mind tools for matters of the mind. In A.L. Costa, J.A. Bellanca & R. Fogarty, If minds matter : A foreword to the future, Vol. II. Palatine, IL: IRI /Skylight Publishing.

Marian Central Catholic High School. (1994). 1994 Annual School Report. Woodstock, IL.

Marzano, R.J. (1992). A rationale and framework for teaching thinking tactics. In J.W. Keefe & H.J. Walberg (Eds.). Teaching for thinking, (15-25). Reston, VA: National Association of Secondary School Principals.

McGinley, Pearson & Valencia, S. (1990). Assessing reading and writing: Building a more complete picture for middle school assessment. Cambridge, MA: Bolt, Baranck & Newman.

Merenbloom, E.Y. (1992). The mindful middle school: A shifting paradigm. In J. Bellanca, A.L. Costa & R. Fogarty (Eds.). If minds matter II: A foreword to the future (pp. 151-160). Palatine, IL: IRI/Skylight Publishing.

Olsen, D. (1995). "Less" can be "more" in the promotion of thinking. Social Education, 59, 130-134.

Perkins, D. & Swartz, R. (1992). The nine basics of teaching thinking. In A. Costa, J. Bellanca & R. Fogarty (Eds.). If minds matter (pp.53-69). Palatine, IL: IRI/Skylight Publishing.

Phillips, J. & Wilen, W. (1995). Teaching critical thinking: A metacognitive approach. Social Education, 59, 135-138.

School District 54. (1994). 1993-1994 Annual Report. Palatine, IL.

School District 54. (1991). Thinking Skills Strategic Plan. Schaumburg, IL.

Shepard, L. (1995). Using assessment to improve learning. Educational Leadership, 52, 38-43.

Sternberg, R. (1987). Teaching critical thinking: Eight easy ways to fail before you begin. Phi Delta Kappan, 456-459.

Wasserman, S. (1987). Teaching for thinking: Louis E. Raths revisited. Phi Delta Kappan, 460-465.

Wright, I. (1995). Making critical thinking possible: Options for teachers. Social Education, 59, 139-143.

Appendices

Appendix A

Junior High Faculty Experience Survey

February 8, 1995

Hola compañeros,

I am currently working on the first chapter of my Action Research project and need your help. Could you please fill in the following information and return it to my box by Friday? **No names, please.**

Number of years teaching experience ________

Current degree________

Muchas gracias,

Julie Kossack

3
19
10
25
5
17
22
25
123

3
25
23
25
27
5
22
15
142

3
18
3
17
29
22
20
22
131

2
20
21
26
17
11
16
111

3
18
11
26
6
22
19
103

4
26
26
18
9
25
26
138

123
142
131
111
103
138 / 748

19 yrs
39) 748
- 39
358
358
0

Appendix B

High School Faculty Experience Survey

To: teachers/staff 2-9-95

From: Christi J. DeWispelaere
RE: statistics

Dear staff,

I am currently enrolled in an "Intro to Research" class as part of my Master's program through St. Xavier's University, and would greatly appreciate your assistance. As part of a Prototype research assignment, I need background information on the faculty/staff of my educational community. Please complete the following questions to assist me in my research.

1.) Years of experience? ____________

2.) Degrees held? ____________

Thank you for your assistance!

Sincerely,
Christi J. DeWispelaere

[illegible]

Appendix B (continued)

Yrs exp.

27
26 (2)
25
24
23
20
19 (2)
17
16
15 (2)
14 (2)
11
10
9
8
7
4
2 (2)
1 (4)

Years of mean = 13.2 yrs.

SD = 7.5

32 teaching

(52) staff total

Degrees

B.S. + MS. in June
B.A. Hist.
B.A. Eng.
B.A. Eng.
B.S. - science + math
B.A.
B.A. + 32
B.A + 30
Science - Accounting
B.S.
B.A.
B.S.
B.S.
B A.
B.A. + 30
B.S. Ed.
B.A. Science/Art Ed.
B.A. music Ed.
B.A
B.A. Ed.
B.A math
B.A.
B.S.
B.A. Psych.
B.A. 3/P.E.
BFA
M.S. Ed.
M.A. Theology
M. Ed.
BA + 8
B.A.
M. ~~Arts~~
masters of Divinity - theology
B.S.
M.S.
M. Rel. Ed
B.S./MS in eng.
M.S.
masters +40
BA + MA - 2
M. Ed.
Doctorate in Rel. Ed.

27 → BA
13 → masters (48%)
1 → doctorate

Appendix C

Behavioral Checklist

BEHAVIOR	PERIOD 3	PERIOD 4	PERIOD [illegible]
very impulsive			
overdependent			
cannot connect means w/ ends			
miss the meaning			
dogmatic & close-minded			
rigid & inflexible			
underconfident			
anti-intellectual			

Appendix D

Review Tests

Español II
Srta. DeWispelaere

Examen de Repaso
de Español I(40 pts.)

Nombre:__________
Fecha:__________

Part I. La Gramática

A. LOS VERBOS- Recall the appropriate present forms of the following verbs for the given subjects.(10 pts.)

1. cantar, yo-__________
2. ir, tú-__________
3. comer, ellos-__________
4. estar, nosotros-__________
5. tener, yo-__________
6. vivir, ella-__________
7. bailar, Juan y yo-__________
8. ser, Uds.-__________
9. venir, Ud.-__________
10. llevar, Juan-__________

B. El VOCABULARIO- Match the following family members to the appropriate Spanish terms. (10 pts)

1. ____mother
2. ____father
3. ____brother
4. ____uncle
5. ____grandfather
6. ____cousin (f.)
7. ____cousin (m.)
8. ____grandmother
9. ____nephew
10. ____aunt

a. la tía
b. la abuela
c. el primo
d. la madre
e. la hermana
f. el padre
g. el tío
h. el sobrino
i. el abuelo
j. la prima
k. el hermano

Part II. La Cultura - In English, choose two of the following topics and compare and contrast to American customs: a. Birthdays and Saint's days, b. Homes and family life, c. Food, d. Transportation. (10 pts., 5 pts. each)

____
____
____
____
____

Appendix D (continued)

Srta. DeWispelaere   Examen de Repaso (cont.)   p.2

Parte III. Preguntas Personales. Contesta las siguientes preguntas en espanol en frases completas.

1.¿Cuál es la fecha de hoy? ________________________________

2.¿Cómo te llamas? ________________________________

3.¿Dónde vives? ________________________________

4.¿Cómo eres? ________________________________

5.¿Qué día es hoy? ________________________________

6.¿Cuándo es tu cumpleaños?

____

7.¿Qué llevas hoy?

____

8.¿De dónde eres? ________________________________

9.¿Cuántos hermanos tienes? ________________________________

10.¿Qué prefieres hacer después de la escuela? ________________________________

____

Esp. II Examen de Repaso(Cont.) P.3

Part IV. Aplicaciones- Predict how you would solve or react to one of the three given situations.Write at least five sentences in Spanish. (10 pts.)

A. Write a letter to an exchange student in Costa Rica about your daily life and family.

B. You are traveling to Spain. What will you take with you, do and which places will you visit?

C. Describe your favorite holiday, when is it and why is it your favorite?

____

____

____

____

____

____

____

____

____

Appendix D (continued)

Español II — Examen de Repaso (50 pts.)

Srta. DeWispelaere — Evalation of Student Results

I. La Gramática: Gathering Information

# correct of 20	percentage of ability

II. La Cultura: Processing Information

# correct of 10	percentage of ability

III. & IV. Aplicaciones: Applying Information

# Correct of 20	percentage of ability

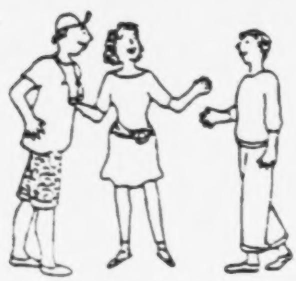
Name ______________________ Period ____ Date __________

Total Points 109

HOW MUCH DO YOU REMEMBER?

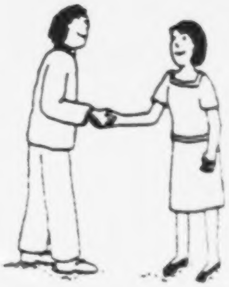
I. **LISTENING COMPREHENSION** Write the number of each conversation beneath the picture below that reflects its content. You will hear each conversation twice. Listen carefully the first time, and number the pictures the second time. (5 points)

1.



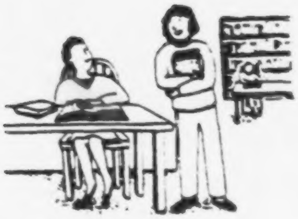
____

2.



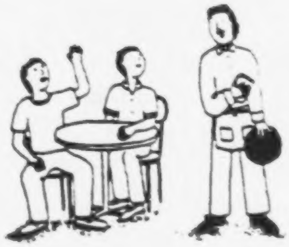
____

3.



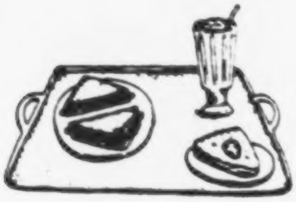
____

4.



____

5.



____

II. VOCABULARY

A. Choose the appropriate English definition. (15 points - 1 point each)

____ 1. bailar
a. to sing b. to dance c. to work d. to eat

____ 2. me llamo
a. I like b. I'm fine c. My name is d. I live

____ 3. me gusta
a. I like b. you like c. My name is d. He likes

____ 4. un té con leche
a. coffee b. tea c. tea with milk d. milk

____ 5. un pan dulce
a. a croissant b. a piece of toast c. a sweet roll d. a sandwich

____ 6. siempre
a. never b. sometimes c. every day d. always

____ 7. los calamares
a. squid b. peanuts c. sausage d. cheese

____ 8. ¿Cómo estás?
a. goodbye b. How are you? c. good morning d. thank you

____ 9. unos tacos de pollo
a. meat tacos b. beans and rice c. enchiladas d. chicken tacos

____10. aleman
a. German b. French c. Spanish d. Italian

____11. abogado
a. teacher b. doctor c. lawyer d. secretary

____12. el bolígrafo
a. the pencil b. the eraser c. the notebook d. the pen

____13. el escritorio
a. the desk b. the chair c. the shelf d. the stereo

____14. los deportes
a. the music b. the sports c. the nature d. the sciences

____15. el perro
a. the cat b. the bird c. the dog d. the mouse

Appendix D (continued)

B. Choose the appropriate Spanish definition. (15 points - 1 point each)

____ 1. soccer
a. el fútbol b. el béisbol c. el volibol d. el golf

____ 2. the sister
a. la tía b. la madre c. la abuela d. la hermana

____ 3. the uncle
a. el padre b. el tio c. el hermano d. el hijo

____ 4. Who?
a. ¿Dónde? b. ¿Cuánto? c. ¿Quién? d. ¿Qué?

____ 5. How many?
a. ¿Cuántos? b. ¿Dónde? c. ¿Quién? d. ¿Por qué?

____ 6. tall
a. bajo b. gordo c. alto d. feo

____ 7. fun, amusing
a. simpático b. aburrido c. inteligente d. divertido

____ 8. blonde
a. moreno b. rubio c. negro d. pelirrojo

____ 9. the church
a. la iglesia b. la catedral c. la escuela d. la biblioteca

____ 10. the post office
a. el banco b. el mercado c. el correo d. la plaza

____ 11. rarely
a. nunca b. siempre c. todos los días d. rara vez

____ 12. never
a. nunca b. siempre c. a menudo d. a veces

____ 13. the street
a. la plaza b. la calle c. la casa d. el correo

____ 14. the stadium
a. el correo b. el estadio c. la plaza d. el museo

____ 15. the library
a. la librería b. el museo c. la piscina d. la biblioteca

III. GRAMMAR

A. Match the subject pronouns with their English definitions. (10 points - 1 point each)

____ 1. yo

____ 2. tú

____ 3. él

____ 4. ella

____ 5. Usted

____ 6. nosotros

____ 7. vosotros

____ 8. ellos

____ 9. ellas

____10. Ustedes

A. you (familiar, singular)

B. we

C. I

D. they (masculine)

E. you all (familiar, plural)

F. they (feminine)

G. he

H. she

I. you (formal, singular)

J. you all (formal, plural)

B. Select the appropriate verb conjugation. (10 points - 1 point each)

____ 1. Yo canto
a. We sing   b. He sings   c. I sing   d. She sings

____ 2. ellos tienen
a. they have   b. she has   c. we have   d. you all have

____ 3. nosotros miramos
a. we watch   b. you all watch   c. they watch   d. he watches

____ 4. él recibe
a. she receives   b. I receive   c. he recieves   d. they receive

____ 5. tú trabajas
a. he works   b. you work   c. I work   d. we work

____ 6. you (familiar, singular) study
a. tú estudias   b. yo estudio   c. él estudia   d. Ud. estudia

____ 7. I read
a. yo leo   b. yo escucho   c. yo recibo   d. yo bailo

____ 8. She is
a. ella es   b. ella vive   c. ella tiene   d. ella necesita

____ 9. Paul goes
a. Paul vive b. Paul va c. Paul tiene d. Paul trabaja

____10. They (feminine) live
a. ellas tienen b. ellas van c. ellas viajan d. ellas viven

C. Masculine or feminine? Place the following nouns into the appropriate columns. Follow the model. (10 points - 1 point each)

Modelo: escritorio

Masculine	Feminine
escritorio	

bolígrafo
cama
señor
señora
televisión
chileno
contador
plaza
autobús
limonada

D. Read the following situations, then complete the exchanges with the appropriate possessive adjectives (my, your, our – in Spanish of course!). Make sure you use the possessive adjective that corresponds with the person identified in each situation. (10 points - 1 point per blank)

1. As you leave for school, you check to see whether you have everything you need:

Hoy yo necesito _______ cuaderno, _______ calculadora y por supuesto

_______ libros.

2. You check the things your sister must take to school:

Elena, tú necesitas _______ mochila, pero no necesitas _______ calculadora.

¿Necesitas _______ libros?

3. Your mother is making sure that you all have everything before leaving on vacation:

Nosotros necesitamos _________ cámara, _________ llaves, _________ carteras,

y _________ discos compactos.

E. Choose from the following list of verbs to complete the description below, using the correct form of an appropriate verb. Use each verb only once. (16 points - 1 point correct verb choice, 1 point correct verb conjugation)

bailar / mirar / trabajar / escuchar / ganar
visitar / ir / ser

Ernesto ______________ estudiante en una universidad en México.

Ernesto ____________ en un restaurante pero él no ______________ mucho

dinero. Nosotros ______________ mucho en la discoteca y Ernesto y yo

_____________ la música rock todos los días. Ernesto ______________ la tv mucho

y yo _____________ los libros de ciencia ficción. Nosotros ______________ a la

casa de sus padres cada domingo para comer la cena (dinner).

IV. READING COMPREHENSION León has called Rosa to discuss their plans for the afternoon. Read their conversation, then answer in English the questions that follow: (8 points - 2 points each)

Rosa	Digame.
León	Hola. ¿Rosa?
Rosa	Sí, ¿quién habla?
León	Habla León.
Rosa	Hola, León. ¿Qué tal?
León	Muy bien. Hay una exhibición de las obras (works) de Picasso en el Museo Contemporáneo. ¿Quieres ir conmigo?
Rosa	Lo siento (I'm sorry), León. Voy a la piscina con Ernesto y después voy al cine con Amelia.
León	Bueno. ¿Y María?
Rosa	María nunca va a los museos. Dice (she says) que los museos son aburridos.
León	Entonces, voy solo (alone). Gracias Rosa. Hasta luego.
Rosa	De nada. Adiós.

1. What does León want to do this afternoon?

____

2. Will Rosa go with León? Where is she going with Ernesto?

____

3. Where is Rosa going with Amelia?

____

4. Why will María probably not go with León?

____

V. CULTURE Your friend will be studying at the University of Spain next year. Choose two of the following topics and describe them to your friend. Write your descriptions in English. (5 points each - 3 points accuracy of information, 2 points appropriateness)

1. In Spain what is the custom when two women greet each other?
2. What is the tradition in Hispanic countries regarding a person's last name?
3. In what respect are Hispanic families different from American families?
4. How is a typical Hispanic town set up?

Appendix D (continued)

GRAMMAR: MASCULINE / FEMANINE
SKILLS: APPLY A CONCEPT, CLASSIFICATION

POSSIBLE POINTS: 10

RAW SCORES PERCENTAGES

GRAMMAR
SKILLS: RECALL

POSSIBLE POINTS: 20

RAW SCORE PERCENTAGE

VOCABULARY
SKILLS: RECALL

POSSIBLE POINTS: 30

RAW SCORES PERCENTAGES

LISTENING
SKILLS: APPLICATION, TRANSFER OF KNOWLEDGE

POSSIBLE POINTS: 5

RAW SCORES PERCENTAGES

CULTURE

SKILLS: UNDERSTANDING, COMPARING, SUMMARIZING, ORGANIZING DATA

POSSIBLE POINTS: 10

RAW SCORES	PERCENTAGES

READING COMPREHENSION

SKILLS: INTERPRET, SUMMARIZE, APPLY CONCEPTS, TRANSFER KNOWLEDGE, SYNTHESIZE

POSSIBLE POINTS: 8

RAW SCORES	PERCENTAGES

GRAMMAR: VERB CONJUGATION

SKILLS: APPLY A CONCEPT, TRANSFER, COMPREHESION

POSSIBLE POINTS: 16

RAW SCORES	PERCENTAGES

GRAMMAR: POSSESIVE ADJECTIVES

SKILLS: APPLY A CONCEPT, TRANSFER KNOWLEDGE

POSSIBLE POINTS: 10

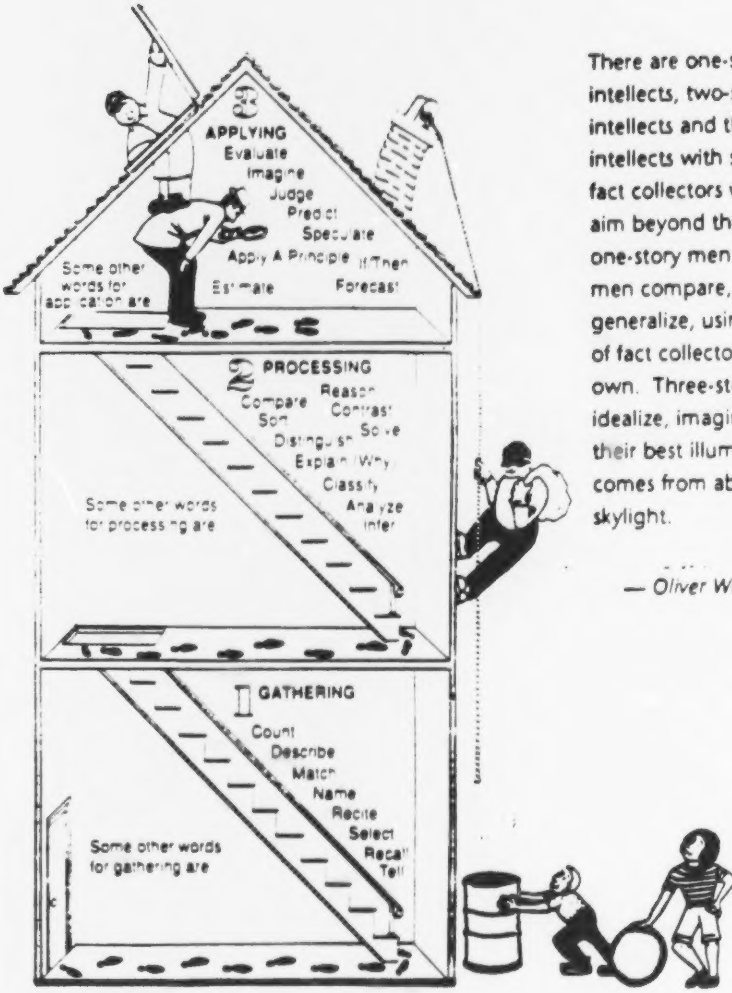
RAW SCORES	PERCENTAGES

Appendix E

Fogarty's Three-Story Intellect

BLACKLINE MASTERS | BLUEPRINTS FOR THINKING

THE THREE-STORY INTELLECT


3
APPLYING
Evaluate
Imagine
Judge
Predict
Speculate
Apply A Principle
If/Then
Estimate
Forecast
Some other words for application are
2
PROCESSING
Reason
Compare
Contrast
Sort
Solve
Distinguish
Explain Why
Classify
Analyze
Infer
Some other words for processing are
1
GATHERING
Count
Describe
Match
Name
Recite
Select
Recall
Tell
Some other words for gathering are

There are one-story intellects, two-story intellects and three-story intellects with skylights. All fact collectors who have no aim beyond their facts are one-story men. Two-story men compare, reason, generalize, using the labor of fact collectors as their own. Three-story men idealize, imagine, predict—their best illumination comes from above the skylight.

— *Oliver Wendell Holmes*

300 Chapter 5, page 89

SKYLIGHT PUBLISHING

Appendix F

Raw Data of High School Review Test

p. 3 = 24   p7 = 22   46 total

92 - 85
|
88

Español II   Examen de Repaso (50 pts.)

Srta. DeWispelaere   Evalation of Student Results

Only document A.
1 section.

I. La Gramática: Gathering Information

correct of 20

20 - ~~||||~~ ~~||||~~ | -11-
19 - || -2-
19 - ~~||||~~ ~~||||~~ || -12-
~~||||~~ ||| -8-
18 - ~~||||~~ | -6-
|| -2-
17 - ||| -3-
| -1-
16 - || -2-
15 - |||| -4-
14-
13-
12-
10

9
8
7
6
5
4
3
2
1

percentage of ability

100 - (11)
97.5 - (2)
95 - (12)
92.5 - (3)
90 - (6)
88 - (2)
(36) 78%

85 - (3)
82.5 - (1)
(10) 22%

lit of accuracy
80 - (2)
75 - (4)

89%
11%

II. La Cultura: Processing Information

# correct of 10

10 - ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ | 46
9 -
8 -
7 -
5 -
4 -
3 -
2 -
1 -

percentage of ability

100%

III. & IV. Aplicaciones: Applying Information

# Correct of 20

20 - |||| -4-
|||| -4-
19 - |||| -4-
~~||||~~ -5-
18 - ~~||||~~ | -6-
||| -3-
17 - ~~||||~~ | -6-
||| -3-
16 - |||| -4-
|| -2-
15 - | -1-
| -1-
14-
13 - | -1-
| -1-
12 - | -1-
11 -
10
9 -
8 -
7 -

6
5
4
3
2
1

percentage of ability / accuracy

100 - (4)
97.5 - (4)
95 - (4)
92.5 - (5)
90 - (6)
88.5 - (3)
(26) 57%

85 - (6.)
82.5 - (3)
80 - (4)
77.5 - (2)
75 - (1)
72.5 - (1)
65 - (1)
62.5 - (1)
60 - (1)
(20) 43%

94% accuracy = oral pres.

BEST COPY AVAILABLE

Appendix G

Raw Data of Junior High Review Test

260 53% at 85% higher-level
47% below 85%

LISTENING
SKILLS: APPLICATION, TRANSFER OF KNOWLEDGE

POSSIBLE POINTS: 5

RAW SCORES	**PERCENTAGES**
5 - 27 22 20	98%
3 - 1	2%

GRAMMAR: MASCULINE / FEMININE
SKILLS: APPLY A CONCEPT, CLASSIFICATION

POSSIBLE POINTS: 10

RAW SCORES		**PERCENTAGES**
10 - 𝍸 𝍸 𝍸 ||| 9 - 𝍸 𝍸 𝍸 𝍸 𝍸 ||||		67%
8 - 𝍸 𝍸 𝍸 𝍸 7 - || 6 - | 5	23	33%

. 75% at 85% mastery of lower levels
25% below 85%

VOCABULARY
SKILLS: RECALL

POSSIBLE POINTS: 30

RAW SCORES **PERCENTAGES**

30 - 𝍸 |||
29 - 𝍸 |||| 50
28 - 𝍸 𝍸 [illegible]
27 - 𝍸 𝍸 ||||
26 - 𝍸 |||| [illegible]

---

25 - 𝍸 ||||
24 - 𝍸 |
23 - ||| 25%
22 - 25
21 - |
20
19
18
17
16

BEST COPY AVAILABLE

Appendix G (continued)

GRAMMAR
SKILLS: RECALL

POSSIBLE POINTS: 20

RAW SCORE		PERCENTAGE
20 - 𝍸 𝍸 𝍸 |		
19 - 𝍸 𝍸 𝍸 |||	54	77%
18 - 𝍸 𝍸 ||		
17 - 𝍸 |||		(85% accuracy)
16 - 𝍸 ||		
15 - |||		
14 - |||		
13 - |	16	23%
12 - |		
11		
10 - |		
9		
8		
7		

BEST COPY AVAILABLE

Appendix G (continued)

70 total

CULTURE

SKILLS: UNDERSTANDING, COMPARING, SUMMARIZING, ORGANIZING DATA

(middle [illegible] [illegible])

POSSIBLE POINTS: 10

RAW SCORES 卌

PERCENTAGES

10 - 卌 卌 卌 卌 卌 卌 卌 卌 卌

9 - 卌

78%

(85% or better)

8 - |

7 - ||

6 - ||

22%

5 - 卌 ||

4 - |

3 - |

2 - |

1

READING COMPREHENSION

SKILLS: INTERPRET, SUMMARIZE, APPLY CONCEPTS, TRANSFER KNOWLEDGE, SYNTHESIZE

POSSIBLE POINTS: 8

RAW SCORES		PERCENTAGES
8 - 𝍸 𝍸 𝍸 || 7 - 𝍸 𝍸 𝍸 |	33	47%
6 - 𝍸 𝍸 | 5 - 𝍸 𝍸 ||| 4 - 𝍸 3 - 𝍸 | 2 - ||| 1		53%

Appendix G (continued)

GRAMMAR: POSSESSIVE ADJECTIVES
SKILLS: APPLY A CONCEPT, TRANSFER KNOWLEDGE

POSSIBLE POINTS: 10

RAW SCORES	PERCENTAGES
10 - 卌 ||||	
9 - |||	17%
8 - |||	
7 - 卌 ||||	
6 - 卌 卌	83%
5 - 卌 |	
4 - 卌 ||	
3 - 卌 |	
2 - |||	
1 - |||	
0 - 卌 卌 |	

GRAMMAR: VERB CONJUGATION
SKILLS: APPLY A CONCEPT, TRANSFER, COMPREHENSION

POSSIBLE POINTS: 16

RAW SCORES		PERCENTAGES
16 - 𝍸 𝍸 𝍸		
15 - ||||	24	34%
14 - 𝍸		
13 - 𝍸 |		
12 - |||		
11 - 𝍸 𝍸 |		
10 - 𝍸 |||	46	66%
9 - |		
8 - 𝍸 |		
7 - |		
6 - |||		
5 - ||		
4 - ||||		
3		
2 - |		
1 - |		

Appendix H

High School Oral Situations

Srta DeWispelaere   Esp II - Repaso

Situations for Oral Presentations

1 Greet a friend on the street and plan the day's excursions

2 At a restaurant, you and a friend greet one another, ask how each other is feeling, then order something to drink, a main course and dessert

3 At the mall, you and a friend are shopping for necessities for a trip that you will be taking soon. Depending on your destination, what will you need?

4 You and a friend have to work on a class project together. Decide where you will meet, why and give directions to the location upon which you have agreed

5 You and a friend call each other on the telephone, chat and discuss your weekend plans

6 A friend is at home sick, so you call to tell what happened at school today

7 You and a friend are shopping for birthday or Christmas gifts for a family member or friend. Discuss what each of you will buy and why

8 You are giving an exchange student a tour of your house. Describe it and tell which room or area is your favorite and why

9 You and a friend are discussing your summer vacations. Talk about two or three activities, choose your favorite and why it was your favorite

10 You meet the new exchange student from México on registration day and the two of you share stories about what school is like, classes, teachers, extracurricular, etc. in the U.S. and in Mexico

Appendix I

Junior High Oral Situations

REVIEW PRESENTATION

A. **Una presentación** Question another student in order to introduce him or her to the class Find out (1) his or her nationality, (2) where he or she is from, (3) what languages he or she speaks, (4) whether he or she likes to sing, dance, travel, etc, and (5) what kinds of food he or she eats Don't try to translate your questions literally from English to Spanish Instead use the Spanish you have learned to find a way to get the information When you have finished, present the student to the class

MODELO: **Quisiera presentarles a Clara. Ella es estadounidense** Es de El Paso, Texas y **habla inglés** y un poco **de español**...

B. **¡Vamos a conocernos!** Your Peruvian exchange student has just arrived Get to know one another by exchanging information Find out

1 his or her name
2 where he or she lives
3 the size and makeup of his or her family
4 his or her likes and dislikes (sports, music, movies, etc)
5 his or her possessions

He or she will ask for the same information from you

C. **Yo soy...** Present yourself to the class Using the Spanish you've learned so far, give as much information as you can about your family, your interests, your activities and your possessions

D. **Comemos en un café** You go to a café for lunch with a person whom you've just met When you arrive, you see a friend of yours Along with two other members of the class play the roles of the students in this situation During the conversation, make introductions, order lunch, and find out as much as possible about each other

Appendix J

Oral Presentation Rubric

Oral Presentation Rubric

Name ______________________________ Date ______________

Topic ____

Check one type of assessment

______ self ______ group ______ teacher

1. Criterion: Eye Contact

1	3	5
APROBADO	BUENO	EXCELENTE
- very little eye contact - looks at floor, away from person	- eye contact is intermittent - looks at speaker / listener occasionally	- good eye contact - looks directly at person when speaking / listening

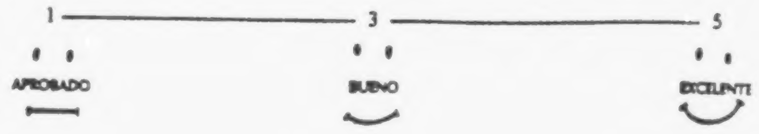
2. Criterion: Comprehensibility (pronunciation, intonation)

1	3	5
APROBADO	BUENO	EXCELENTE
-presentation cannot be heard -major pronunciation errors make it difficult to understand	-presentation is loud enough -minor pronunciation errors make it difficult to understand at times	-presentation is loud enough and easy to understand

3. Organization

1	3	5
APROBADO	BUENO	EXCELENTE
-lack of organization	-good organization	-well-organized

4. Subject/Verb Agreement

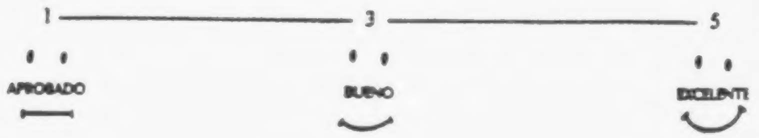

1
3
5
APROBADO
BUENO
EXCELENTE

-significant flaws

-frequent flaws

-minor flaws

5. Subject/Adjective Agreement

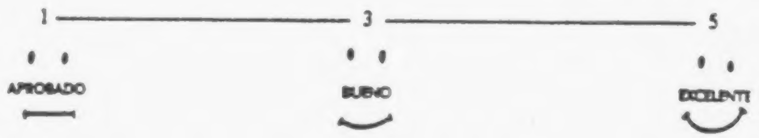

1
3
5
APROBADO
BUENO
EXCELENTE

-significant flaws

-frequent flaws

-minor flaws

6. Correct Word Choice


1
3
5
APROBADO
BUENO
EXCELENTE

-frequent misusage of words changes the presentations meaning

-minimal misusage of words, does not effect presentations meaning

-appropriate word choices

TOTAL SCORE ________

COMMENTS

SCALE	27 - 30	A
	24 - 26	B
	21 - 25	C
	18 - 20	D
	Below 17	todavia no

Appendix K

Grupo ____________________ Fecha ____________________ Clase ______
Nombres ____

✍✍✍ DIARIO REFLEXIVO ✍✍✍

Tema ____

1 Key ideas from the lesson / discussion / video / presentation ______________

2 Connections we can make with other ideas /concepts ______________

3 Questions we still have ______________

Action Research / Reflog 2

NOMBRE________________________ FECHA____________________ CLASE______

EVALUACIÓN INDIVIDUAL / CONTEMPLACIÓN

1. WHAT WERE YOU SUPPOSED TO DO?________________________

2. WHAT DID YOU DO WELL? WHY?________________________

3. WHAT WAS YOUR FAVORITE PART? WHY?________________________

4. WHAT WAS YOUR LEAST FAVORITE PART? WHY?________________________

5. WHAT KEY THINGS DID YOU LEARN?________________________

6. WITH WHAT DO YOU STILL NEED HELP?________________________

7. IF YOU DID THIS TASK OVER, WHAT WOULD YOU DO DIFFERENTLY?________________________

8. WHAT GRADE DO YOU THINK YOU DESERVE AND WHY?________________________

9. CAN YOU "CONNECT" THIS ASSIGNMENT WITH SOMETHING YOU PREVIOUSLY LEARNED AND HOW?________________________

10. CAN YOU "CONNECT" THIS ASSIGNMENT WITH SOMETHING IN YOUR OWN LIFE? EXPLAIN________________________

11. WHAT ARE YOUR NEW GOALS?________________________

ACTION RESEARCH/ REFLOG 3

Appendix L

Higher Order Thinking Skills Survey and Results

To Faculty of Mead Jr. High / Marian Central Catholic High School
From Julie Kossack and Christi DeWispelaere
Re Higher Order Thinking Skills Action Research Project, St. Xavier University / IRI Skylight

Please answer the following questions regarding higher order thinking skills and return the survey to my box by Friday, November 3rd. Thank you for your cooperation.

1 I understand the higher order thinking skills concept

strongly agree ______ strongly disagree
5 4 3 2 1

2 I incorporate higher order thinking skills in my daily teaching

strongly agree ______ strongly disagree
5 4 3 2 1

3 I am well prepared to teach higher order thinking skills

strongly agree ______ strongly disagree
5 4 3 2 1

4 I am confident in my ability to teach higher order thinking skills

strongly agree ______ strongly disagree
5 4 3 2 1

5 I am confident about being observed teaching higher order thinking skills

strongly agree ______ strongly disagree
5 4 3 2 1

6 Modeling of higher order thinking skills was provided in my College Training

strongly agree ______ strongly disagree
5 4 3 2 1

7 I have had training in how to implement higher order thinking skills

strongly agree ______ strongly disagree
5 4 3 2 1

8 There is a lack of opportunity for higher order thinking skills in the present classroom structure

strongly agree ______ strongly disagree
5 4 3 2 1

9 It is important to integrate higher order thinking skills into the daily classroom structure

strongly agree ______ strongly disagree
5 4 3 2 1

Appendix L (continued)

of the 42 survey sent 53% returned compl.
Survey sent -> 13% returned totally
Invalid due to: incomplete
5% - partially incomplete 29% not returned of the

To: Faculty of Mead Jr. High / Marian Central Catholic High School
[redacted] and Christi DeWispelaere
Re. Higher Order Thinking Skills Action Research Project, St. Xavier University / IRI Skylight

Please answer the following questions regarding higher order thinking skills and return the survey to my box by Friday, November 3rd. Thank you for your cooperation.

1. I understand the higher order thinking skills concept

strongly agree — strongly disagree
5 [✓ 4] 3 2 1

2. I incorporate higher order thinking skills in my daily teaching

strongly agree — strongly disagree
5 4 3 2 1

3. I am well prepared to teach higher order thinking skills

strongly agree — strongly disagree
5 4 [✓ 3] 2 1

4. I am confident in my ability to teach higher order thinking skills

strongly agree — strongly disagree
5 4 3 2 1

5. I am confident about being observed teaching higher order thinking skills

strongly agree — strongly disagree
5 4 3 [✓ 2] 1

6. Modeling of higher order thinking skills was provided in my College Training

strongly agree — strongly disagree
5 4 3 [✓ 2] 1

25 years ago

7. I have had training in how to implement higher order thinking skills

strongly agree — strongly disagree
5 4 3 [✓ 2] 1

8. There is a lack of opportunity for higher order thinking skills in the present classroom structure

strongly agree — strongly disagree
5 4 [✓ 3] 2 1

9. It is important to integrate higher order thinking skills into the daily classroom structure

strongly agree — strongly disagree
5 4 3 2 1

22 total completed
10 incomplete

Key and '7 @ 33

To: Faculty of Mead Jr. High / Marian Central Catholic High School
From: Julie Kossack and Christi DeWispelaere
Re: Higher Order Thinking Skills Action Research Project, St. Xavier University / IRI Skylight

Please answer the following questions regarding higher order thinking skills and return the survey to my box by Friday, November 3rd. Thank you for your cooperation.

21/33 = 64% returned
4 incomplete (19%)
17 complete

1. I understand the higher order thinking skills concept

strongly agree — strongly disagree
5 (5) | 4 (12) | 3 (1) | 2 (1) | 1 (1)

2. I incorporate higher order thinking skills in my daily teaching

N/A

strongly agree — strongly disagree
5 (1) | 4 (8) | 3 (5) | 2 (1) | 1 (0)

3. I am well prepared to teach higher order thinking skills

strongly agree — strongly disagree
5 (1) | 4 (6) | 3 (9) | 2 (2) | 1 (0)

4. I am confident in my ability to teach higher order thinking skills

strongly agree — strongly disagree
5 (1) | 4 (8) | 3 (6) | 2 (3) | 1 (0)

5. I am confident about being observed teaching higher order thinking skills

N/A

strongly agree — strongly disagree
5 (1) | 4 (6) | 3 (5) | 2 (3) | 1 (2)

6. Modeling of higher order thinking skills was provided in my College Training

strongly agree — strongly disagree
5 (1) | 4 (2) | 3.5 (1) | 3 (3) | 2 (6) | 1 (4)

7. I have had training in how to implement higher order thinking skills.

strongly agree — strongly disagree
5 (1) | 4 (2) | 3 (5) | 2 (6) | 1 (3)

8. There is a lack of opportunity for higher order thinking skills in the present classroom structure.

strongly agree — strongly disagree
5 (2) | 4 (3) | 3 (4) | 2 (4) | 1 (3)

9. It is important to integrate higher order thinking skills into the daily classroom structure

strongly agree — strongly disagree
5 (10) | 4 (5) | 3 (1) | 2 (1) | 1 0

This area must Not apply to a Resource Program.

High School and Junior High Historical Lesson for the Day of the Dead

El día de los muertos
Action Plan

Day 1

1. Watch *El dia de los muertos* video or read articles on the Day of the Dead.
2. In cooperative base groups use a Venn diagram to compare and contrast Halloween and the Day of the Dead.
3. Use reflog 2 to process in cooperative groups.
4. Have students read article on *Ofrendas* and answer questions for homework.

Day 2

1. In cooperative base groups, share answers from homework.
2. As a class, discuss attributes of an *Ofrenda*.
3. Show and discuss teacher's model of *Ofrenda* (Roberto Clemente).
4. Pass out attribute sheet, references cited list and rubric to cooperative base groups. Discuss.
5. Assign groups historical figures.
6. Remainder of period will be spent researching figures in the library.
7. Homework: Bring materials needed for assembly of *altares* (i.e. magazines, markers, objects,.

Day 3

1. Finish research in the library if necessary.
2. Work in cooperative base groups on assembly of *altares*.

Day 4

1. Finish working on *altares*.
2. Complete references cited sheet.
3. Homework: Using an original graphic organizer, compare and contrast the Day of the Dead with ways in which we, as individuals, remember those who have died.

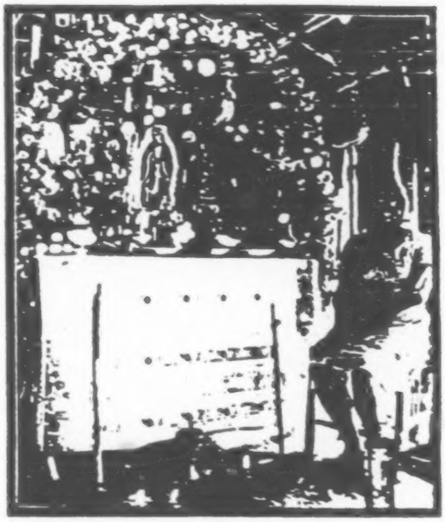
Day 5

1. In cooperative base groups, discuss homework and choose one original graphic organizer that best represents the feelings or opinions of your group.
2. Set up *altares* for teacher, base group and outside group evaluations.
3. Return to cooperative base groups for processing.
4. Complete individual reflection question: If you had to pay homage to a deceased loved one, explain what you would do and why?

Action Research: APMUERTO

What is an *Ofrenda* ?

What is an *ofrenda?* An *ofrenda is* a home altar which can be found in many mexican homes all year round. An altar is a place within the home where people give presents to their gods or their ancestors; it is here where the family prays and remembers their dead relatives or loved ones. These *ofrendas* or altars, are decorated in a very special way for the celebration of the Day of the Dead. A photograph of the deceased, bright yellow *cempazúchil* flowers, images of saints, candles, and things that once belonged to the deceased (like a favorite hat) will all decorate the *ofrenda* during this celebration. These objects are placed in the *ofrenda* to honor and please the souls. Favorite foods and drinks of the deceased like *mole, atole, tortillas*, fruits, *pan de muerto* (sweet bread flavored with anise), chocolate, sugar skulls ,etc., are also placed in the altar. It is believed that the souls will partake in the essence of the food. After November second, family and friends of the deceased will gather and share the food that was in the altar.



Woman sitting beside Ofrenda Marc Sommers 1985
Tantoyuca, Veracruz

Do you know some names of any flowers used during special occasions ?

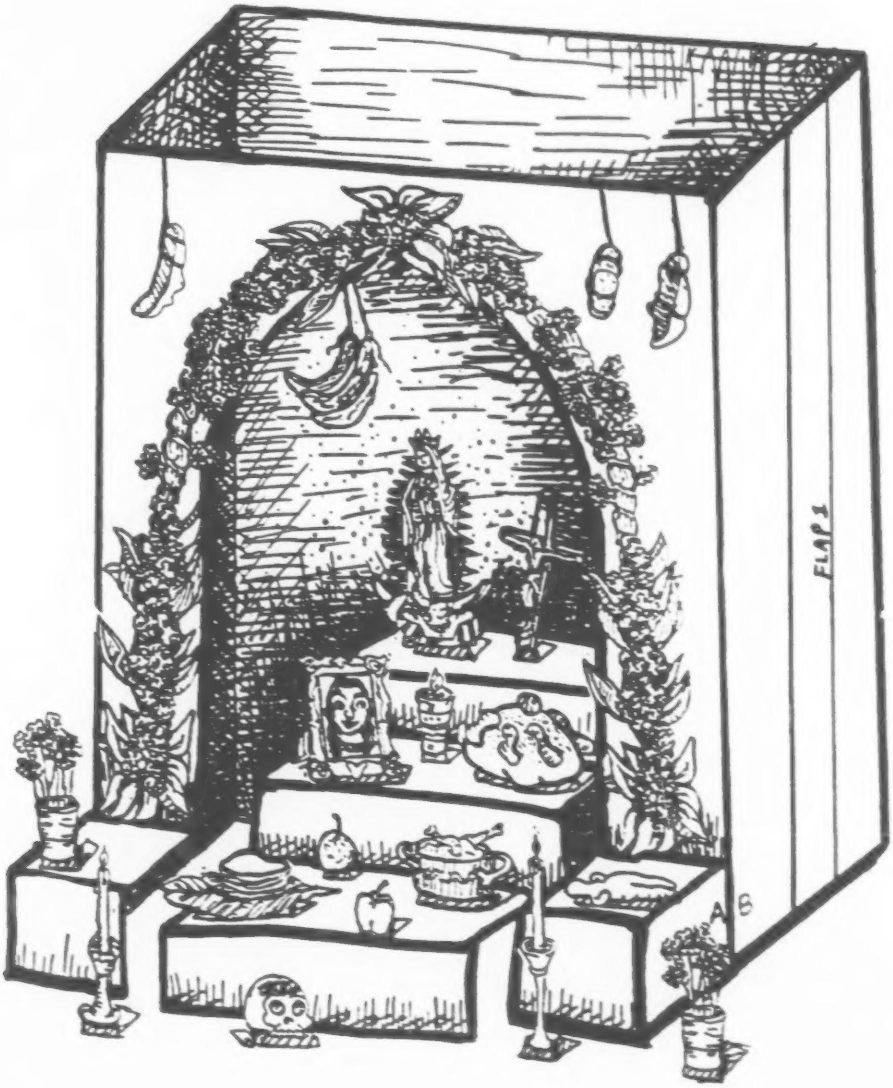
We buy flowers for special holidays during the year. Can you name some of these holidays ?

In what other places do you see altars ?

What kinds of food do people eat during the holidays such as Christmas, Thanksgiving, and New Year ?

Appendix M (continued)

Sample of Ofrenda



personas fallecidas para altares

PERSONA FALLECIDA	GRUPO	PERSONA FALLECIDA	GRUPO
1. Roberto Clemente		2. Juan de Mena	
3. Federico Garcia Lorca		4. Jorge Manque	
5. Pancho Villa		6. Hernán Cortés	
7. Miguel de Cervantes		8. Benito Juárez	
9. Emiliano Zapata		10. Miguel Hidalgo y Costilla	
11. Bartolome de Torres Naharro		12. Diego Rivera	
13. Lope de Vega		14. Tirso de Molina	
15. Andrés Segovia		16. Miguel Covarrubias	
17. Pedro Calderon de la Barca		18. Rufian Tamayo	
19. *George I. Sanchez		20.*Rudolfo Anaya	
21. *Tomás Rivera		22. Lasarro Cardenas	
23. Miguel de Unamuno		24. Antonio Machado	
25. Carlos Chavez		26. Juana Inés de la Cruz	

27. Pablo Picasso ____________

28. Salvador Dali ____________

29. Manuel de Falla ____________

30. *Ernesto Garlaza ____________

31. *Rubén Salazar ____________

32. *Francisco P. Ramirez ____________

33. Juan Ponce de León ____________

34. Isaac Albeniz ____________

35. Enrique Granados ____________

36. Mariano Azuela ____________

37. José Guadalupe Posada ____________

38. Juan Ramon Jimenez ____________

39. Junipero Serra ____________

40. Diego Velazquez ____________

Copyright - 1993 Grolier Electronic Publishing, Inc.

Clemente, Roberto

Roberto Walker Clemente, b. Carolina, Puerto Rico, Aug. 18, 1934, d. Dec. 31, 1972, became one of baseball's greatest right fielders during his 18-year career (1955-72) with the National League's Pittsburgh Pirates. Clemente won four National League batting titles (1961, 1964, 1965, 1966) while compiling a .317 lifetime average, precisely 3,000 hits, and 1,305 runs batted in. He was the league's Most Valuable Player in 1966 and was selected to the All-Star team 12 times. He also won 12 Gold Glove awards as the NL's premier right fielder, and he was frequently cited by experts as having the best outfielder's throwing arm they had ever seen. After his death in an airplane crash while aiding Nicaraguan earthquake survivors, Clemente was elected to the Hall of Fame in an unprecedented special vote.

Bibliography: Musick, Phil, Who Was Roberto (1973); Wagenheim, Kal, Clemente!, 2d ed. (1984).

PERSON:

ATTRIBUTE	COMMENTS	OBJECT
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

REFERENCES CITED :

1. ....

2. ....

3. ....

4. ....

5. ....

Appendix M (continued)

RUBRIC: EL DÍA DE LOS MUERTOS

NOMBRES____________________________________FECHA______________

CLASE DE EVALUACIÓN ____ INDIVIDUAL ____ PROFESORA ____ GRUPO

Criterion 1: Objects

¡Creo que no! 1	Regular 3	¡Olé! 5
*6 or fewer	*7-9	*all 10

Criterion 2: Person's name on altar

Creo que no! 1	Regular 3	¡Olé! 5
*non-existent	*visible but not legible	*large, legible *visible

Criterion 3: Physical Appearance

¡Creo que no! 1	Regular 3	¡Olé! 5
*monotone	*colorful	*eye-catching very colorful

Criterion 4: Multi-media

¡Creo que no! 1	Regular 3	¡Olé! 5
*no variety in objects used	*1 or 2 types of objects	*4 or more varieties used

Criterion 5: Organization

¡Creo que no! 1	Regular 3	¡Olé! 5
*poorly organized *sloppy *exhibits poor transfer of information	*organized *exhibits average transfer of information	*well-organized *neat *exhibits complete transfer of info

Criterion 6: Matrix

¡Creo que no! 1	Regular 3	¡Olé! 5
*person cited *15 or more blanks incomplete	*person cited *7 blanks incomplete	*person cited *all attributes, comments and objects completed

Criterion 7 Bibliography of works cited

¡Creo que no!	Regular	¡Olé!
1	3	5
*works not cited	*works cited with major errors	*works cited with minor errors

Comments ______________________________

Total score __________

35 - 32	A
31 - 28	B
27 - 24	C
23 - 21	D
20 F	¡Creo que no!

Criterion 7: Bibliography of works cited

¡Creo que no!	Regular	¡Olé!
1	3	5
*works not cited	*works cited with major errors	*works cited with minor errors

Comments ______________________________

____

____

____

Total score __________

35 - 33	A
32 - 30	B
29 - 27	C
26 - 24	D
23 F	¡Creo que no!

Action Research muertrub

Appendix M (continued)

Español II   El Día de los Muertos   Nombre ______________

Reflección Individual

Contesta (en inglés) la pregunta siguiente del Día de los Muertos:

If you had to pay homage to a deceased loved one, explain what you would do and why?

____

____

____

____

Nombre______________________ La fecha ______________

Tema____

Essay Evaluation

Little evidence of thoughtfulness 6 POINTS	Some evidence of thoughtfulness 8 POINTS	Strong evidence of thoughtfulness 10 POINTS
responses only	responses supported by specific examples	responses supported by examples and personal reflections

Comments:

Nombre______________________ La fecha ______________

Tema____

Essay Evaluation

Little evidence of thoughtfulness 6 POINTS	Some evidence of thoughtfulness 8 POINTS	Strong evidence of thoughtfulness 10 POINTS
responses only	responses supported by specific examples	responses supported by examples and personal reflections

Comments:

5 = 𝍸 𝍸

4 = 𝍸

3 =

Español II **El Día de los Muertos** **Nombre** [illegible]

Reflección Individual

[illegible]

Contesta (en inglés) la pregunta siguiente del Día de los Muertos:

If you had to pay homage to a deceased loved one, explain what you would do and why?

I would pray to them, keep a picture of them on [illegible] and [illegible] the greatest [illegible] they [illegible] and keep the memory of them [illegible] and tell my children about them. The most loved of all my loved ones is my Grandfather [illegible] passed away when my mom was [illegible] the [illegible] and misses him a lot. My mom likes to tell me about him and what he used to do. Occasionally she'll cry while telling me things, but it's always happy crying because she knows that even though I never knew him that I still love him dearly and often think of him. I know he's watching over me everyday protecting me and guiding me to do what's right and just!

5

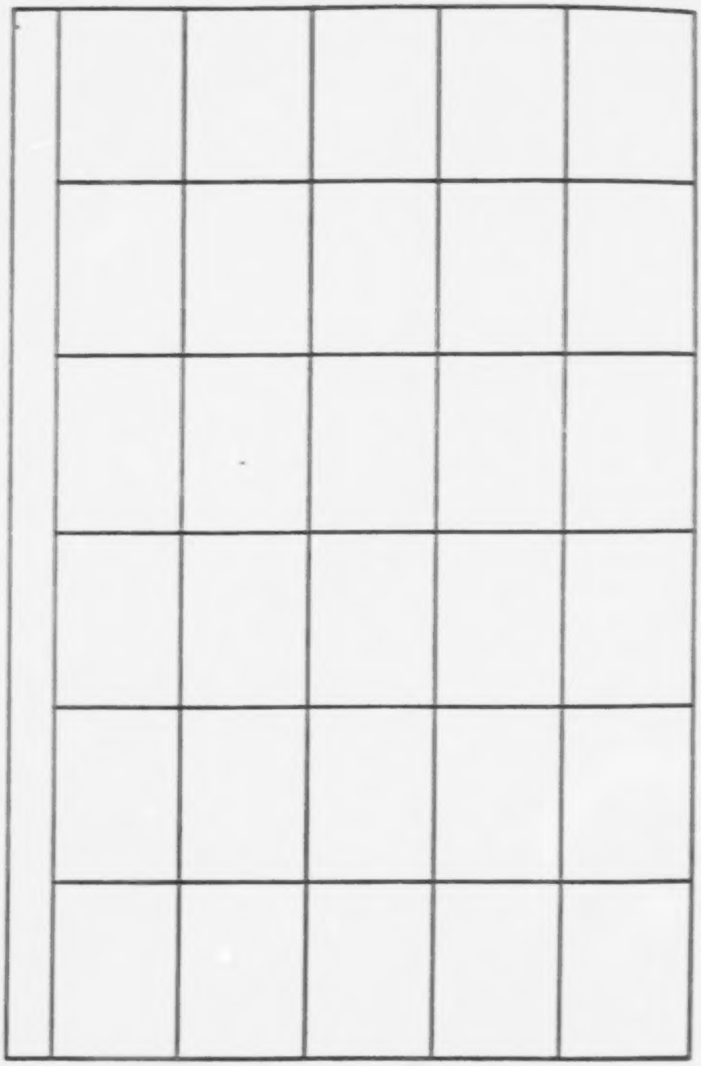
5

[illegible] for [illegible] your [illegible] those memories with you!

BEST COPY AVAILABLE

Appendix N

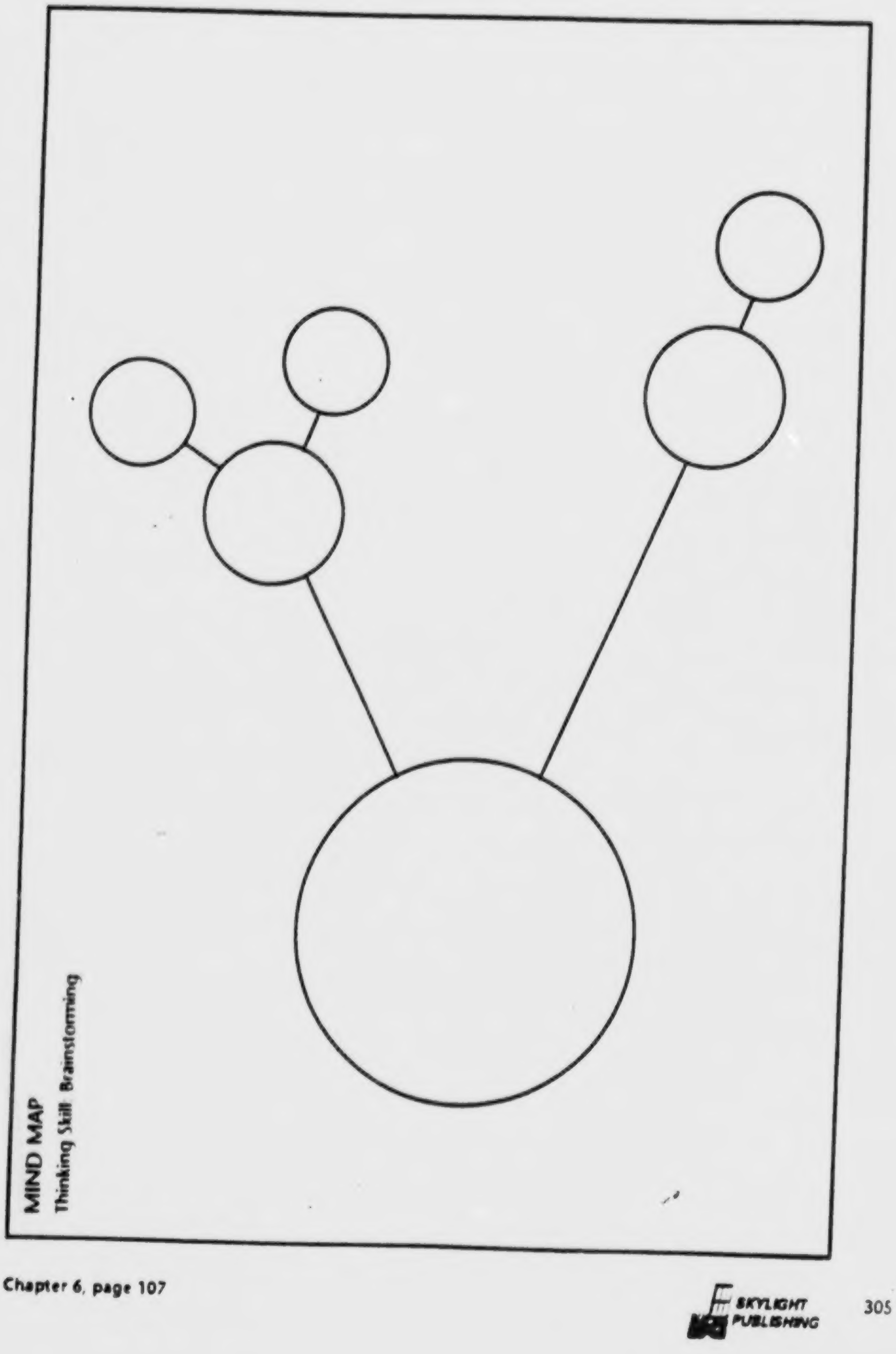
Graphic Organizers



MATRIX
Thinking Skill: Classifying

SKYLIGHT PUBLISHING

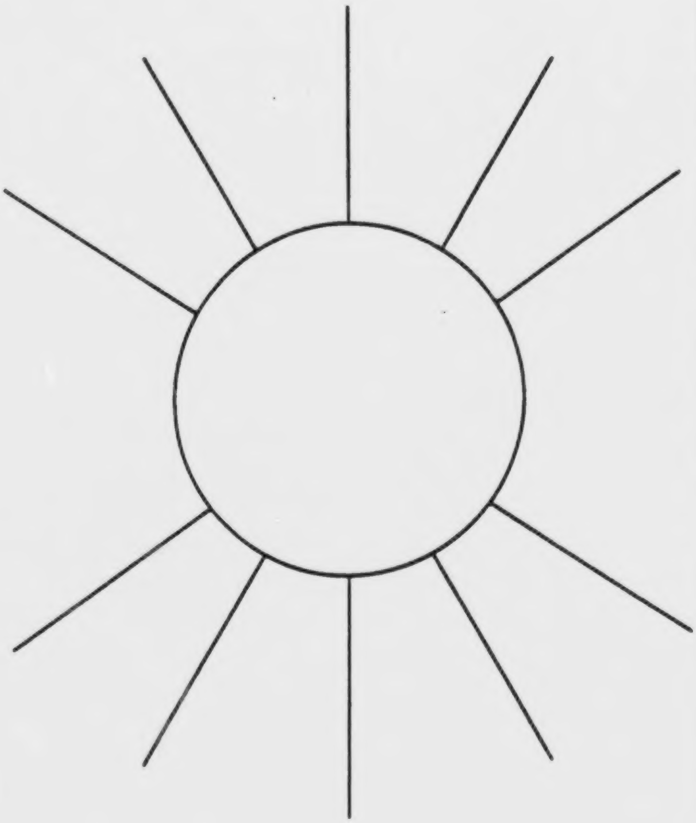
Appendix N (continued)


MIND MAP
Thinking Skill: Brainstorming

Chapter 6, page 107

SKYLIGHT PUBLISHING

Appendix N (continued)



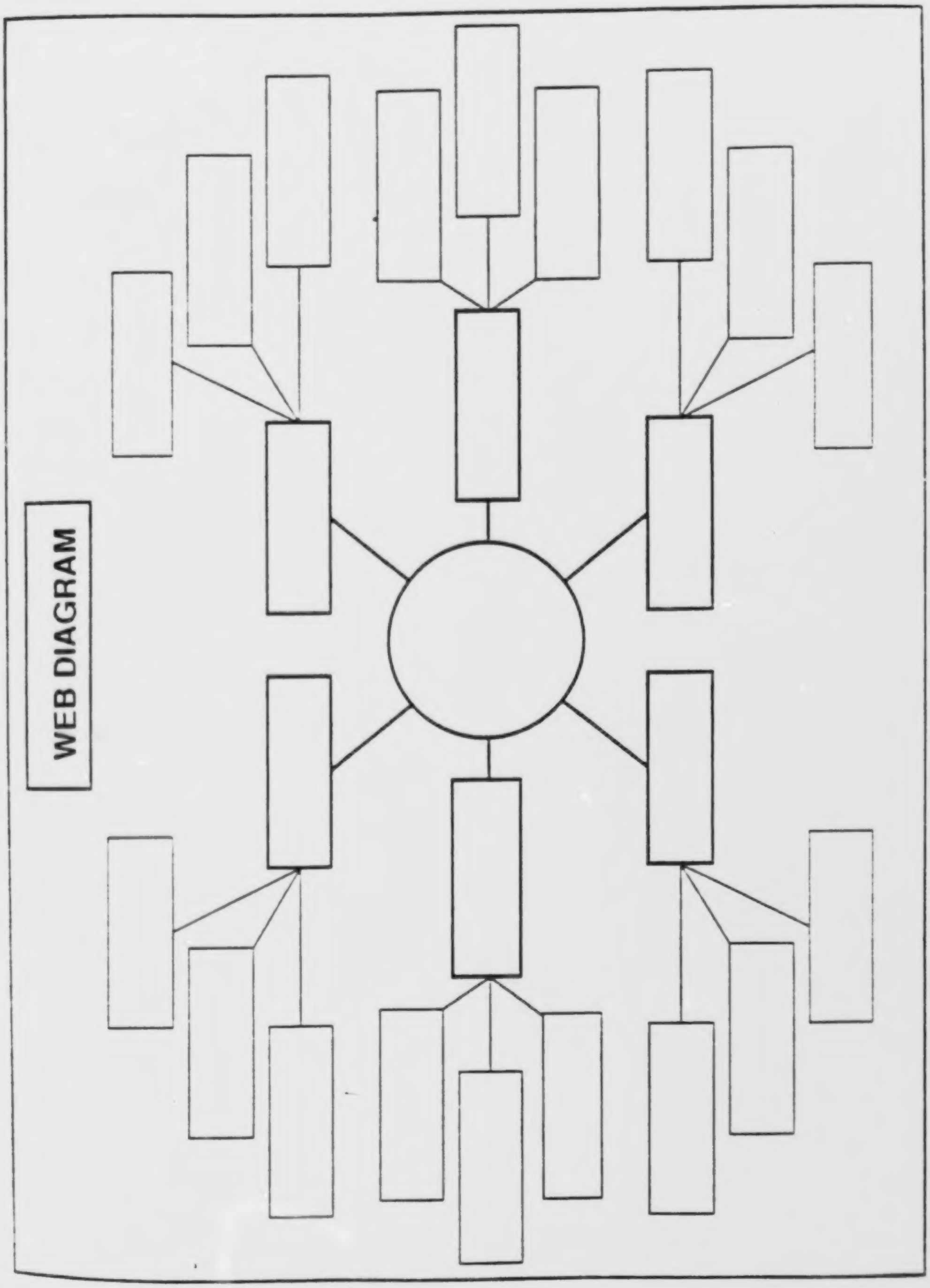
WEB
Thinking Skill: Analyzing Attributes

SKYLIGHT PUBLISHING

Appendix N (continued)

ORGANIZING THINKING—BOOK 2

BLACKLINE MASTER GRAPHS



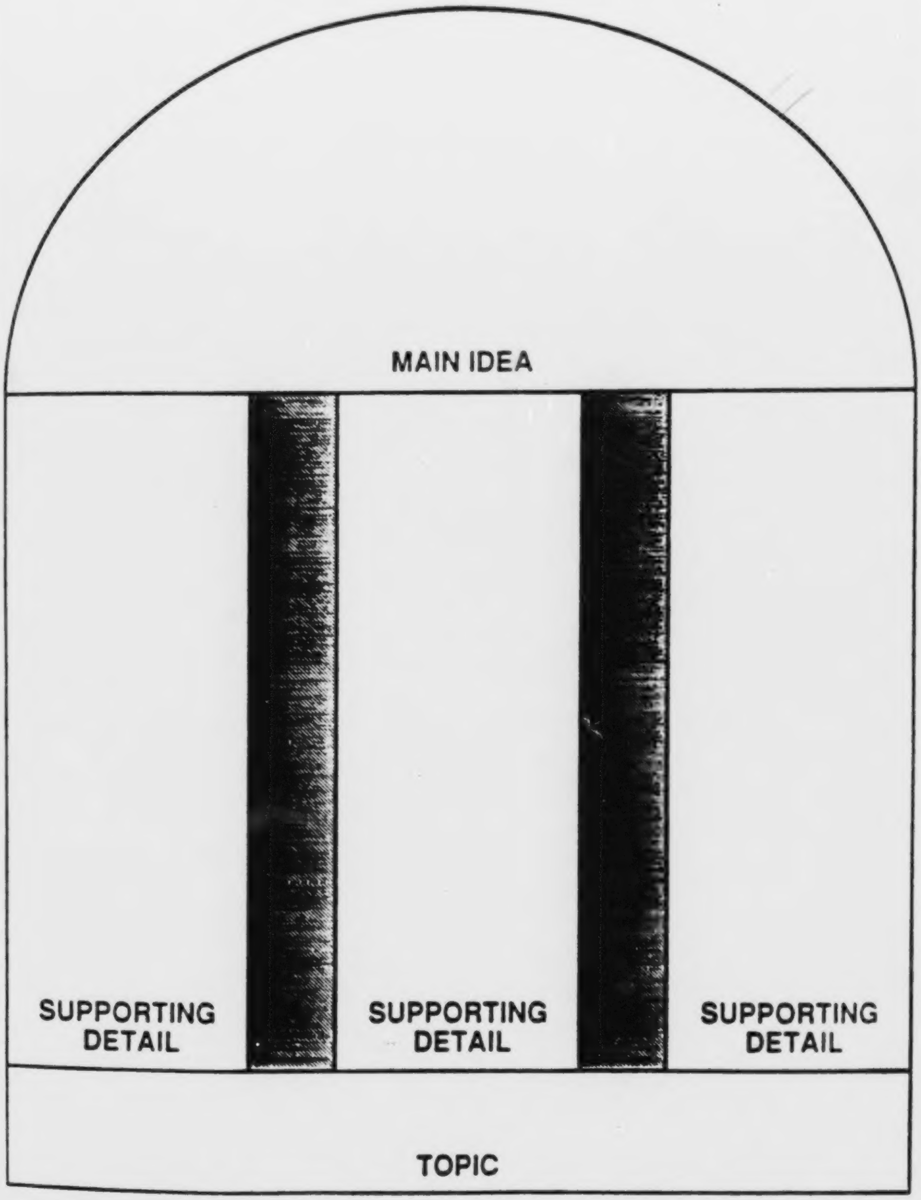
[illegible] Midwest Publications • Critical Thinking Press & Software • P. O. Box 448, Pacific Grove, CA [illegible]

THE QUESTION MATRIX

QUESTIONS	OBJECT □ I	OBJECT ○ II

Appendix N (continued)

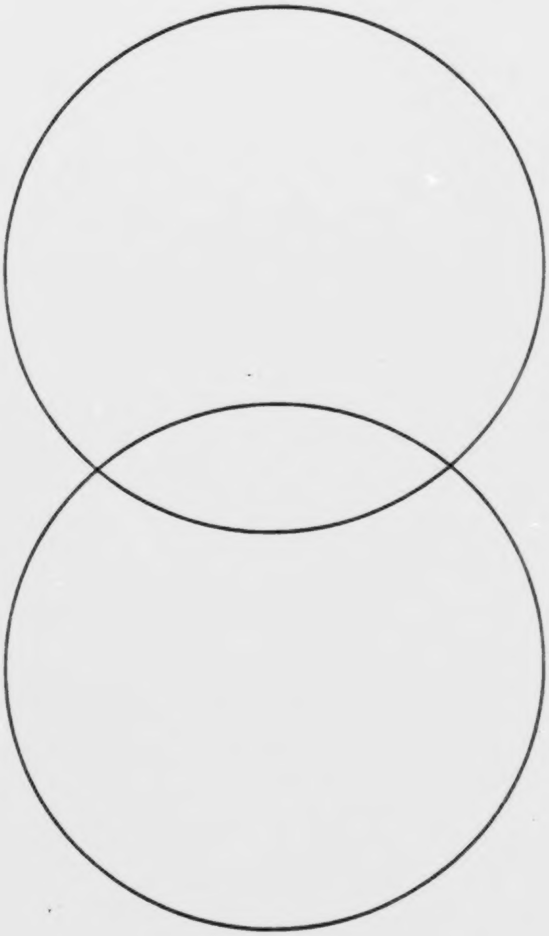
ARCH DIAGRAM: MAIN IDEA AND SUPPORTING DETAILS

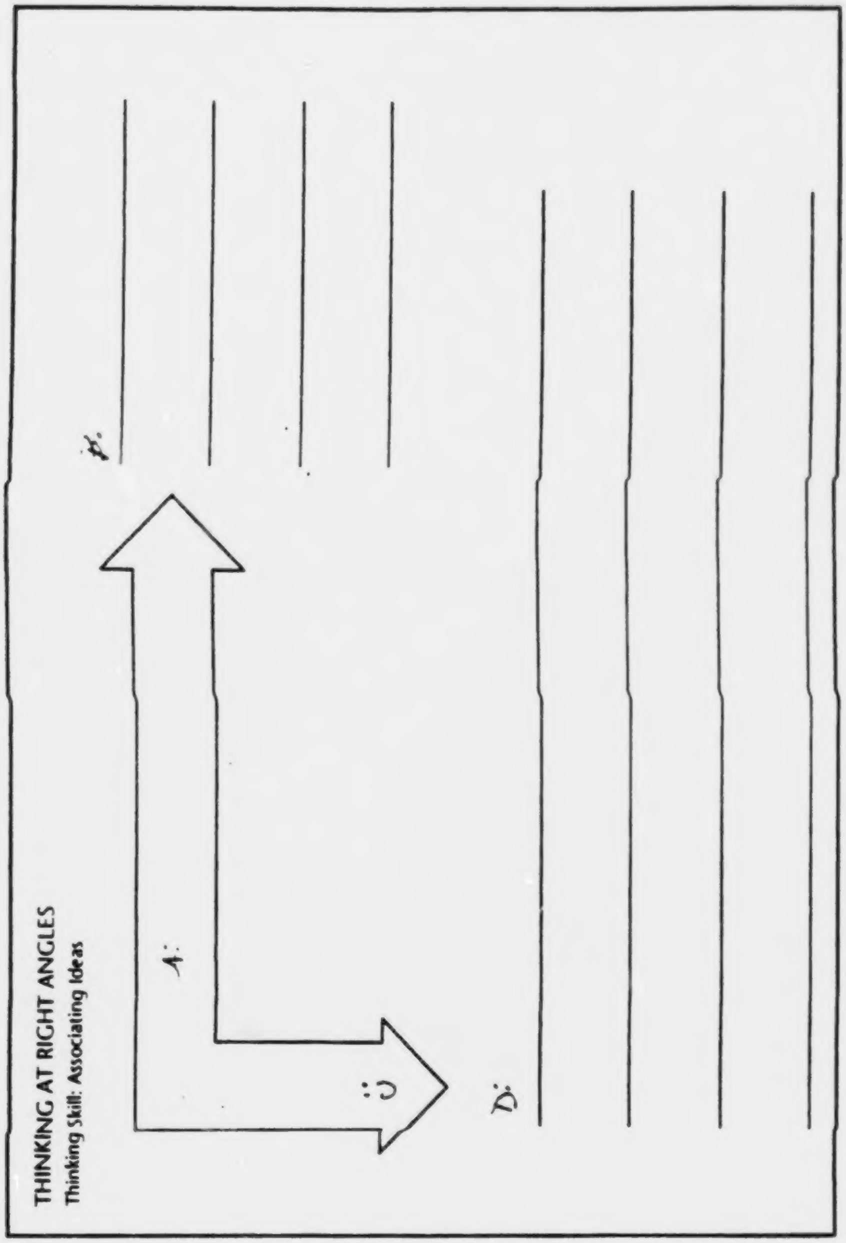

MAIN IDEA
SUPPORTING DETAIL
SUPPORTING DETAIL
SUPPORTING DETAIL
TOPIC

Midwest Publications · Critical Thinking Press & Software · P. O. Box 448, Pacific Grove, CA 93950

Appendix N (continued)

VENN Diagram
Thinking Skill: Comparing & Contrasting





THINKING AT RIGHT ANGLES
Thinking Skill: Associating Ideas

SKYLIGHT PUBLISHING

THE GATHERING GRID

Topic: ________________________________

Item 1	Item 2	Category	Item 3	Item 4

© 1992 Skylight Publishing

Appendix N (continued)

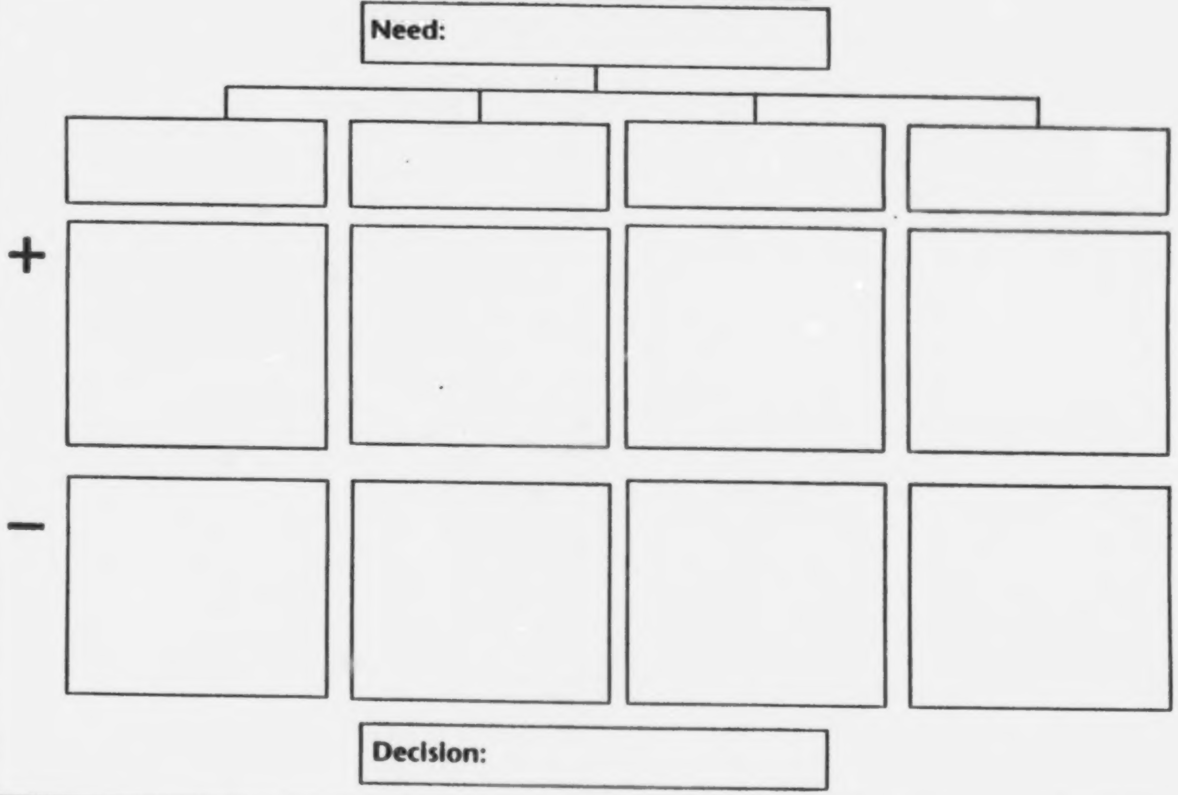
PMI
Thinking Skill: Evaluating

P+	
M–	
I?	

SKYLIGHT PUBLISHING

THE DECISION MAKER'S FLOW CHART

Topic: ______________________



SKYLIGHT PUBLISHING

© 1992 Skylight Publishing

THE FRAME

Name(s):

© 1992 Skylight Publishing

Appendix N (continued)

The Verb Grid

Appendix N (continued)

INVENT YOUR OWN GRAPHIC ORGANIZER

Appendix N (continued)

THE KWL

Topic: ____________________

Know	**W**ant to know	**L**earned

SKYLIGHT PUBLISHING

© 1992 Skylight Publishing

Dec. 6, 1995

(12) PMI (3) on Ch. 2 Exam – to reflect on the class concepts in the chapter. * modeled on Dec. 5 – only need brief mod.

A/10 = ~~||||~~ ~~||||~~ |||| (14) 64%
C/8 = ~~||||~~ | (6) 26%
B/7 = || (2) 9%
F/0 = | (1) 4%

(13) Exam – (could choose) of 4 graph. org for ~~extra credit~~ points

(22/23 = chose 1 of 4 →) 96% with scale (21/22)

(3) A/10 = ~~||||~~ || 9 = ~~||||~~ 6 = |||| 7 = ||| 5 = || 3/1 1 (6%)

– more difficult to relate to [illegible] but [illegible] totally

BEST COPY AVAILABLE

Appendix P

Raw Data of Junior High Chapter 9 Quiz

4) Quiz 3-9-1

- Tv guide page as organizer Did well responding to oral questions because had visual organizer to look at.
- Reading Culture Frame

scores: 79% 8-10 pts 𝍸 𝍸 𝍸 𝍸 ||
12% 6 7 ||||
9% 5 or lower |||

BEST COPY AVAILABLE

Appendix Q

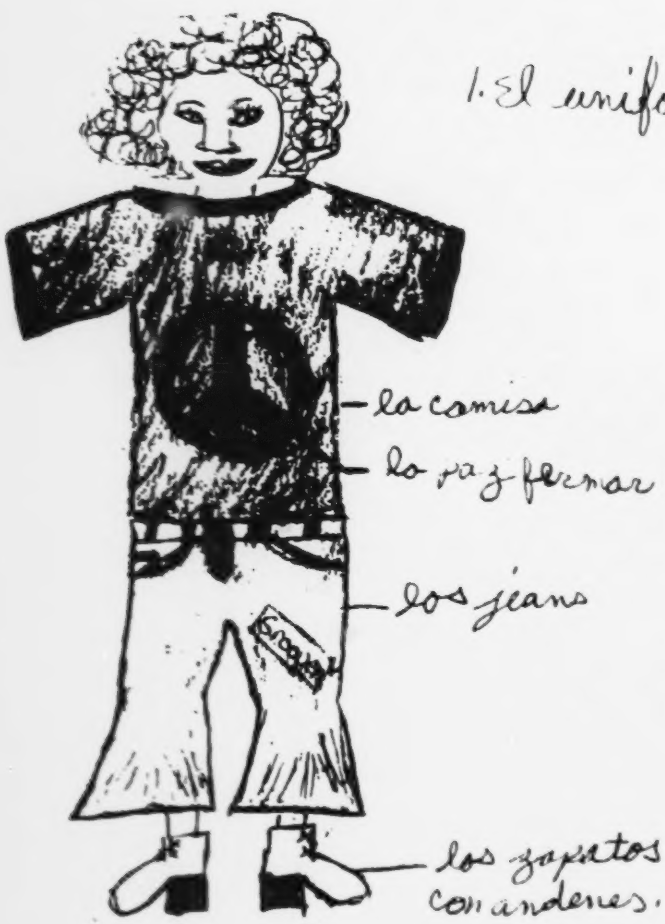
School Uniform Project Lesson Plan

Lesson Plan: Design Your Own School Uniform -Sept. 18,1995

Objective: To practice Chapter 1 vocabulary regarding school in the united States and Hispanic countries and clothing.

Process:

1. REad directionsfor "Actividad," page 35 in the Spanish II text aloud; with a visual and description in Spanish, design a new school uniform.
2. Students pick numbers to establish pairs.
3. Using concensus, students determine elements to be included in their uniform, draw the image and add colors., using the "Invent Your Own " graphic organizer.
4. Students write a summary to describe their design, using Ch. 1 vocabulary and checking for correct verb -subject and noun-adjective agreement.
5. Students present their new design to the class.
6. Students complete re flection log to analyze the activity and determine application for future activities.


la camisa
la paz fermar
Groovy
los jeans
los zapatos con andenes.

1. El uniforme ~~El~~ camisa es morado, los jeans son azules, y los zapatos son blancos.

2. Tengo un(a) dibujo de paz ^ fermaa es oro.

3. Sí, llevan los chicos y las chicas la misma clase de uniforme.

4. No llevo(a) el sombrero, llevo(e) los zapatos con andenes. tacones

9/10

Mónica Hansen y Eva Suceo

Appendix Q (continued)

NOMBRE Guis Powers FECHA es el viernes de [illegible] CLASE 3

EVALUACIÓN INDIVIDUAL / CONTEMPLACIÓN

1. WHAT WERE YOU SUPPOSED TO DO? desgn a new unform

2. WHAT DID YOU DO WELL? WHY? answer the questions because they were easy

3. WHAT WAS YOUR FAVORITE PART? WHY? the group work because it is time out from regular lessons

4. WHAT WAS YOUR LEAST FAVORITE PART? WHY? having to stand up and talk because I don't [illegible] presentations unless I have to [illegible]

5. WHAT KEY THINGS DID YOU LEARN? to need an [illegible] partner

6. WITH WHAT DO YOU STILL NEED HELP? nothing

7. IF YOU DID THIS TASK OVER, WHAT WOULD YOU DO DIFFERENTLY? I would take it home and [illegible] it instead of [illegible] my partner do it

8. WHAT GRADE DO YOU THINK YOU DESERVE AND WHY? B because it was better than everyone but not [illegible] material because it was not colored

9. CAN YOU "CONNECT" THIS ASSIGNMENT WITH SOMETHING YOU PREVIOUSLY LEARNED AND HOW? I can connect it with learning the different parts of clothing we had to tell what the [illegible] were.

10. CAN YOU "CONNECT" THIS ASSIGNMENT WITH SOMETHING IN YOUR OWN LIFE? EXPLAIN. Yes because we wore uniforms

11. WHAT ARE YOUR NEW GOALS? To try my hardest on every thing

Appendix R

Festival Poster Lesson Plan

Purpose: To enable a student to structure the decision making process.

Cooperative Group Roles: encourager, checker, recorder

Lesson

Day 1

1. In cooperative groups match the vocabulary words need, consequence, decision, flow chart and alternative. Have students teach one another the words and do a random oral quiz (with pesos) to check for comprehension.

2. Review DOVE guidelines.

3. Model flow chart. Need = Which sport to play this year.

4. Assign roles.

5. Have students complete the flow chart using topic: TV, and need: To select one-hour show per week. Share with another group their final decision and why. Sign charts.

6. Process using the following questions.

    a. What did we do well?

    b. What can we do better?

    c. List the steps you go through when using the chart.

Day 2

1. Review Decision Maker's Flow Chart.

2. Assign roles.

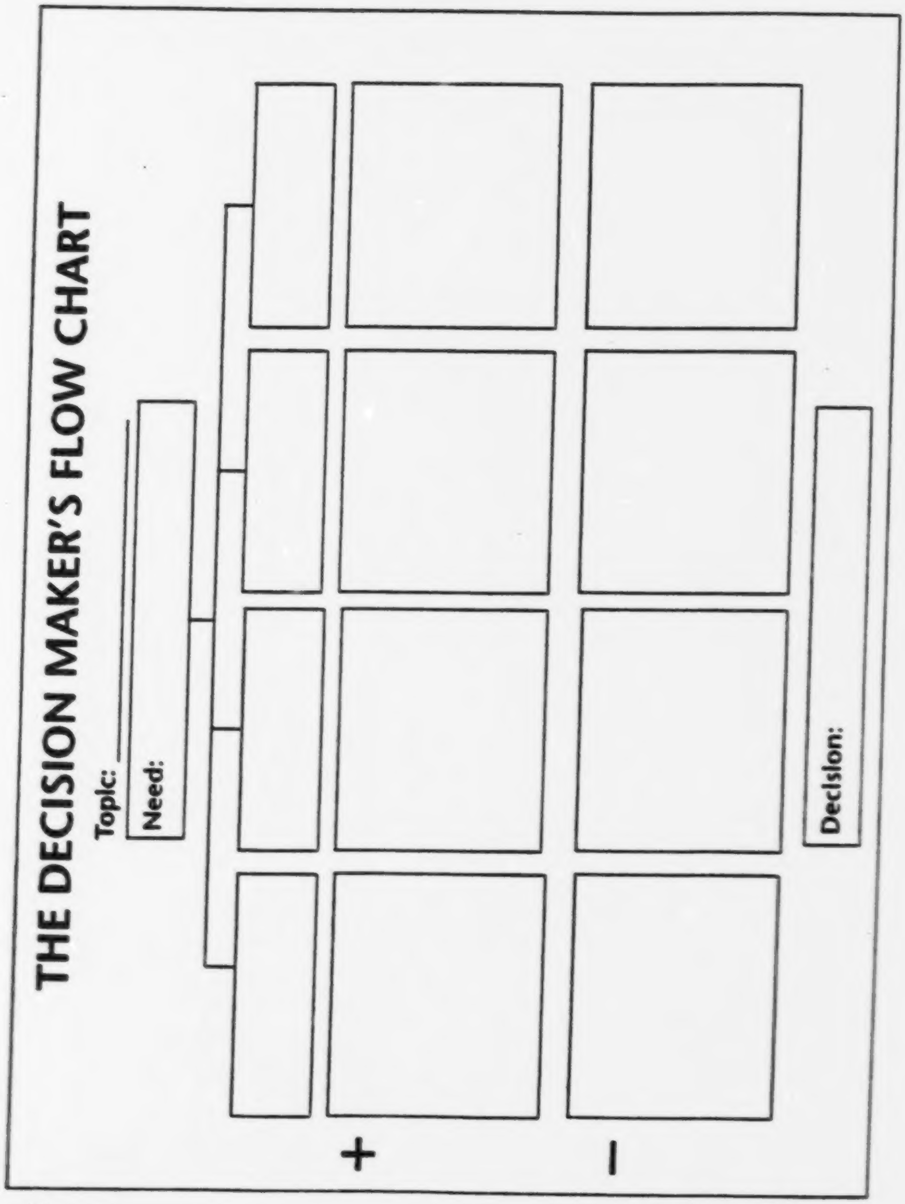
3. Use flow chart to create a theme for their Fiesta poster.

4. Share Fiesta poster rubric criteria with groups.

5. Design Fiesta poster using markers and magazine cut-outs.

Day 3

1. Complete poster.
2. Process in groups using a PMI chart. Round-robin share processing.
3. Grade posters and put on display for viewing.


THE DECISION MAKER'S FLOW CHART
Topic:
Need:
+
–
Decision:

© 1992 Skylight Publishing

DOVE GUIDELINES

D = Defer judgment; accept others's ideas; avoid criticism and put-downs.

O = Originality is O.K.

V = Variety and Vastness of ideas is a start; explore many ideas; search for the best ideas.

E = Expand by piggybacking on others' ideas; associate; build on others.

Blue prints for Thinking IRI / Skylight Publishing 1991

Chapter 9 Fiesta Poster Rubric

Names: ______________________________

Evaluator: ______________________________

Criterion 1: Poster title

LO SIENTO 1	BIEN 3	SOBRESALIENTE 5
-no title	-title -not legible	-title -large & legible

Criterion 2: Events

LO SIENTO 1	BIEN 3	SOBRESALIENTE 5
-1 to 3 events	-4 to 6 events	-7 or more events

Criterion 3: Event times

LO SIENTO 1	BIEN 3	SOBRESALIENTE 5
-no times given	-standard time used	-military time used

Criterion 4: Publisher / Group Name

LO SIENTO 1	BIEN 3	SOBRESALIENTE 5
-group name missing	-group name only	-group name and S.A. written

Criterion 5: Presentation

LO SIENTO 1	BIEN 3	SOBRESALIENTE 5
-monotone	-colorful	-colorful -eye catching

Criterion 6: Decision Maker's Flow Chart

LO SIENTO 1	BIEN 3	SOBRESALIENTE 5
-missing	-included -incomplete	-included -completed

Total score: _____

Comments:

Grading Scale:

A	27 - 30
B	24 - 26
C	21 - 23
D	18 - 20
todavía no	17 and below

Appendix S

Spanish Cartoon Project Lesson Plan

Purpose: To sequence story events. To outline sequential events or materials.

Cooperative Group Roles: recorder, checker, encourager/reader

Thinking Skills: sequencing, perceiving, time-sequenced relationships

Day 1

1. Each group will receive an envelope with a cut-apart comic strip inside. Students are to arrange the frames into a sequence that makes sense. Rotate the completed sequence frames among groups to check. Assist with any disagreements. Allow groups to try more than 1 if time allows.
2. Explain to students that they are going to learn how to frame stories and information. A framework consists of six or more frames arranged in a time or an idea sequence.
3. Assign roles.
4. Read story - "The Dinner Party" by Mona Gardner.
5. Agree on 8 major events in the story.
6. Frame each event in order with balloon comments. (draw, illustrate)
7. All group members sign the product.
8. Teacher comments on best features of each.
9. Group processing occurs. How did your group work well together?
10. Review framework steps.
    a. read info
    b. break into parts
    c. frame each part
    d. check for order of parts

Day 2

1. Each group will make up its own cartoon. Each cartoon must involve three expressions of time and the verb venir used four times.

2. Each group should come up with the 8 major events first, then construct the cartoon frame.

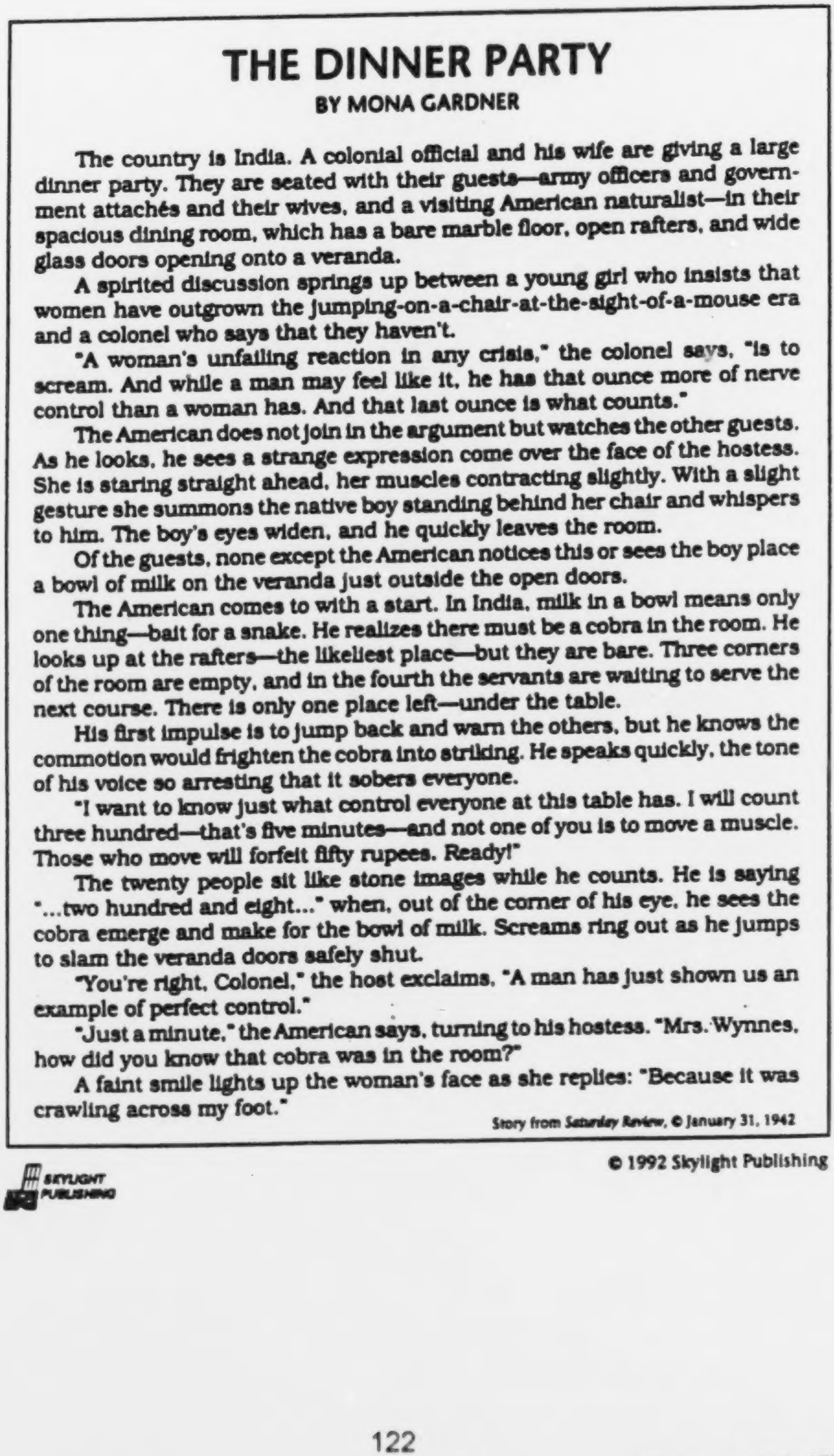
3. Frames will be photocopied and cut apart so groups can put back together for sequencing practice.

4. Group processing using Mrs. Potter's questions.

    a. What were you supposed to do?
    b. What did you do well?
    c. What would you do differently next time?
    d. Do you need any help?

5. Transfer: Students will use the frame on their Chapter 9 quiz to come up with the 8 major ideas in a reading comprehension section.

Appendix S (continued)



THE DINNER PARTY

BY MONA GARDNER

The country is India. A colonial official and his wife are giving a large dinner party. They are seated with their guests—army officers and government attachés and their wives, and a visiting American naturalist—in their spacious dining room, which has a bare marble floor, open rafters, and wide glass doors opening onto a veranda.

A spirited discussion springs up between a young girl who insists that women have outgrown the jumping-on-a-chair-at-the-sight-of-a-mouse era and a colonel who says that they haven't.

"A woman's unfailing reaction in any crisis," the colonel says, "is to scream. And while a man may feel like it, he has that ounce more of nerve control than a woman has. And that last ounce is what counts."

The American does not join in the argument but watches the other guests. As he looks, he sees a strange expression come over the face of the hostess. She is staring straight ahead, her muscles contracting slightly. With a slight gesture she summons the native boy standing behind her chair and whispers to him. The boy's eyes widen, and he quickly leaves the room.

Of the guests, none except the American notices this or sees the boy place a bowl of milk on the veranda just outside the open doors.

The American comes to with a start. In India, milk in a bowl means only one thing—bait for a snake. He realizes there must be a cobra in the room. He looks up at the rafters—the likeliest place—but they are bare. Three corners of the room are empty, and in the fourth the servants are waiting to serve the next course. There is only one place left—under the table.

His first impulse is to jump back and warn the others, but he knows the commotion would frighten the cobra into striking. He speaks quickly, the tone of his voice so arresting that it sobers everyone.

"I want to know just what control everyone at this table has. I will count three hundred—that's five minutes—and not one of you is to move a muscle. Those who move will forfeit fifty rupees. Ready!"

The twenty people sit like stone images while he counts. He is saying "...two hundred and eight..." when, out of the corner of his eye, he sees the cobra emerge and make for the bowl of milk. Screams ring out as he jumps to slam the veranda doors safely shut.

"You're right, Colonel," the host exclaims. "A man has just shown us an example of perfect control."

"Just a minute," the American says, turning to his hostess. "Mrs. Wynnes, how did you know that cobra was in the room?"

A faint smile lights up the woman's face as she replies: "Because it was crawling across my foot."

Story from *Saturday Review*, © January 31, 1942

© 1992 Skylight Publishing

Appendix T

Identifying Details Lesson Plan

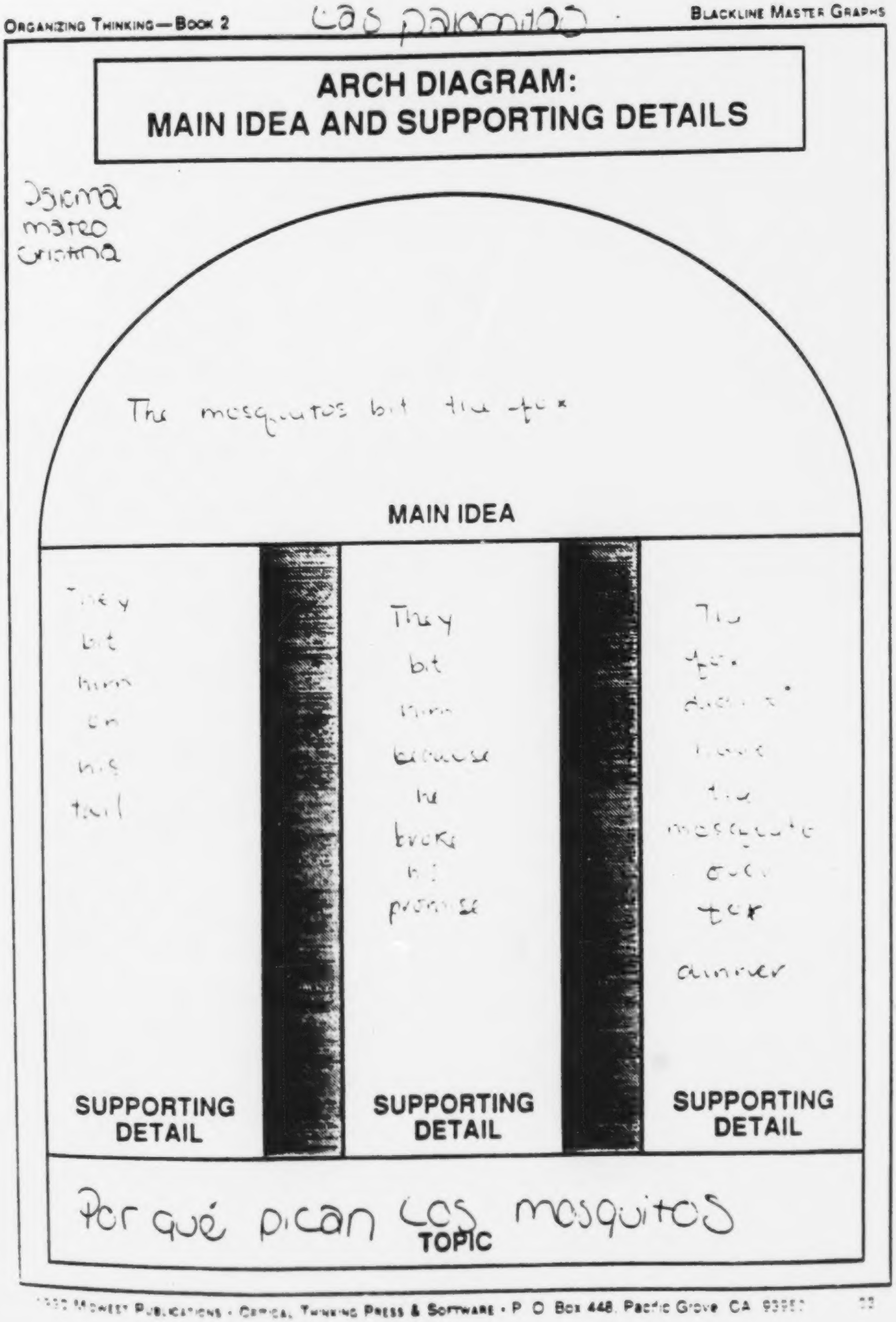
Lesson Plan: Arch Diagram-- Identifying Details Oct.5, 1995

Objective: to identify the details of the story "Porque los mosquitos Pican," in chapter 1 of the Level II Reader.

Process:

1. Students read aloud chapter 1 story in class, one sentence per student in Spanish.
2. Volunteers summarize the story in English.
3. Students join pre-established cooperative groups.
4. Teacher models the "Arch Diagram" graphic organizer with "The Three Little Pige," identifying the main idea, characters, three supporting details and the moral of the story or application to real life.
5. In their cooperative groups, students identify elements of the Chapter 1 story, following the teacher model and byusing concensus to arrive at a story analysis to reflect the opinions of hte group.
6. A representative from each group presents their answers for each element of the "Arch Diagram"to the class.
7. The class discusses value of diferring answers and other possible applications for the "Arch Diagram" within the content.

Appendix T (continued)



Las palomitas

ARCH DIAGRAM: MAIN IDEA AND SUPPORTING DETAILS

Osiana
mateo
Cristina

The mosquitos bit the fox

MAIN IDEA

5/5

They bit him on his tail

SUPPORTING DETAIL

They bit him because he broke his promise

SUPPORTING DETAIL

The fox doesn't have the mosquito over for dinner

SUPPORTING DETAIL

Por qué pican los mosquitos

TOPIC

Midwest Publications • Critical Thinking Press & Software • P. O. Box 448, Pacific Grove, CA 93950

Appendix U

Stem-changing Verbs Lesson Plan

Lesson Plan: Gathering Grid-- Stem-changing Verbs -Nov.8,1995

Objective: to associate new stem-changing to previously -learned verbs.

Process:

1. Students are introduced to new "o to ue" verbs, page 79 in hte Spanish II text and repeat sample verb.
2. Students gather in pre-established cooperative groups.
3. Teacher models "Gathering Grid" with a previously -learned verb. The type of verb is labeled at the top of the grid, subject pronouns are listed vertically down the middle column, then the corresponding forms are listed in the left column of the "new" verb.
4. According to teacher model, in groups, students complete their "Gathering Grid" graphic organizer with four new stem-changing verbs.
5. When all groups have completed the grid, students share their cooperative answers to fill in the class model-grid on the chalkboard.
6. Class discusses completed verbs, errors, successes and further questions they may have about stem-changing verbs.

BILL SCHAFFER

THE GATHERING GRID

GUILLERMO

Topic: Stem-changing Verbs

Item 1	Item 2	Category	Item 3	Item 4
costar	volver	Verbs	llover	jugar
cuesto	vuelvo	yo	llueve	juego
cuestras	vuelves	tu	llueves	juegas
cuestra	vuelve	él, ella, Ud	llueve	juega
costamos	volvemos	Nosotros	llovemos	jugamos
costáis	volvéis	Vosotros	llovéis	jugáis
cuestran	vuelven	Uds	llueven	juegan

© 1992 Skylight Publishing

BEST COPY AVAILABLE

Appendix V

Attribute Comparison Lesson Plan

Lesson Plan: Tío Mundo--Attribute Comparison — 12-8-95

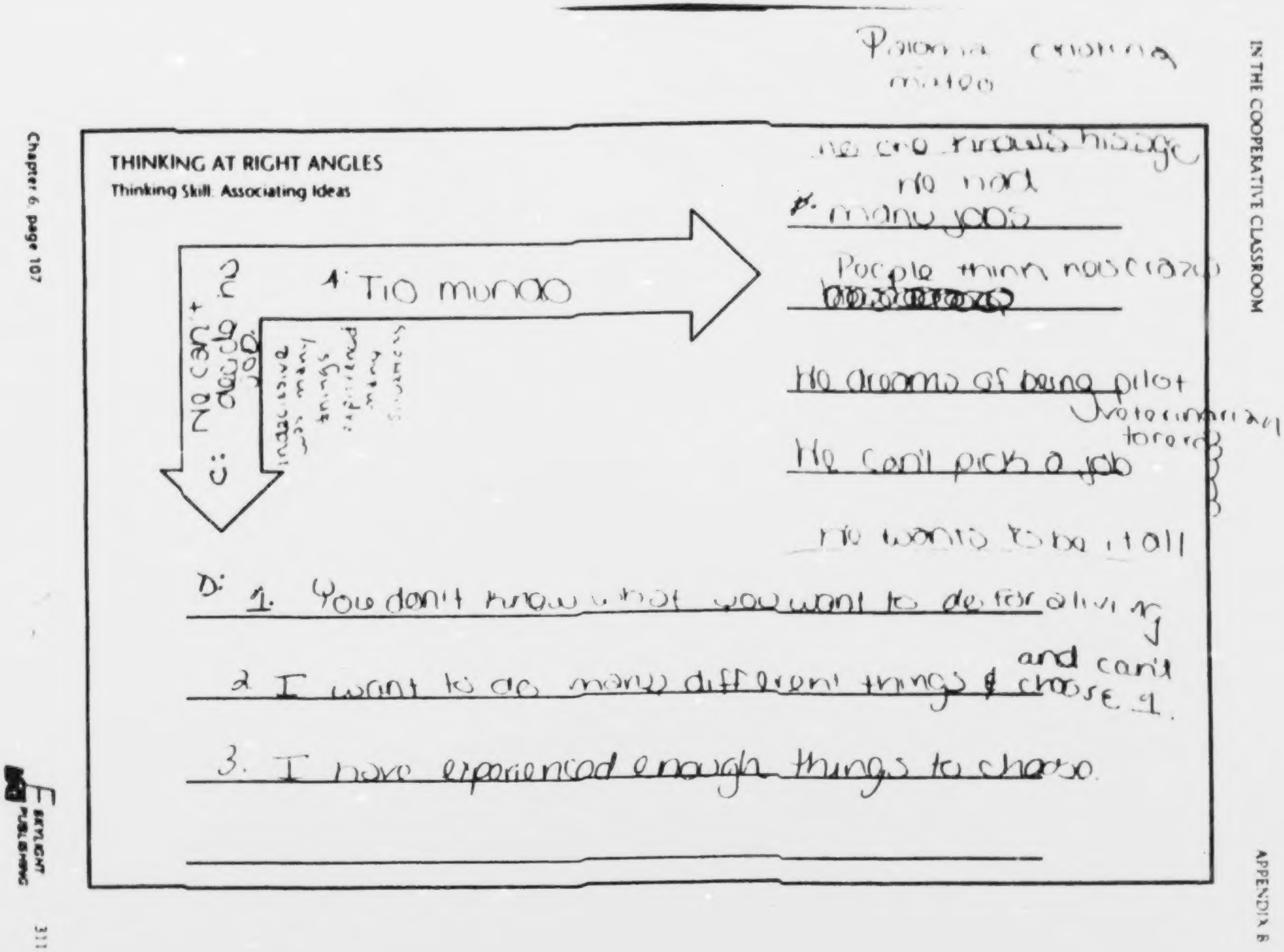
Objectives: To apply knowledge Chapter 2 vocabulary and grammar, check reading comprehension and analyze the story "Tío Mundo" in the Level II reader.

Process:

1. As a class, read aloud one sentence per person "Tío Mundo," in Level II Fuentes Reader in Spanish.
2. Students volunteer to summarize comprehension of the story in English.
3. Students gather in pre-established cooperative groups of 3 or 4 and are assigned roles as recorder, task-master-encourager and timekeeper-checker.
4. Teacher models "Right Angle" graphic Organizer.

**"A"is a concept, principle, person or idiom.
"B"is a list of six attributes of "A".
"C"- Pick 1 attribute by concensus and write a full sentence to define -support the chosen attribute.
"D"-Each member of group writes a sentence to reflect "A's" attribute in student's own personality.

5. In cooperative groups, students brainstorm elements to complete the Right Angle , describing Tío Mundo.
6. When groups are finished, students give samples from their group product to share with the class.



Paloma cristina
mateo

THINKING AT RIGHT ANGLES

Thinking Skill: Associating Ideas

A: Tio mundo

no one knows his age
he had
B. many jobs
People think he's crazy
He dreams of being pilot
veterinarian
torero
He can't pick a job
he wants to be it all

C: He can't decide on job

indecisive
[illegible]

D: 1. You don't know what you want to do for a living

2 I want to do many different things & and can't choose 1.

3. I have experiensed enough things to choose.

SKYLIGHT PUBLISHING

BEST COPY AVAILABLE

Appendix W

The Verbs Ser and Estar Lesson Plan

Graphic Organizer: Compare and contrast diagram

Purpose: Compare and contrast two terms or ideas

Lesson

1. Write the 2 concepts ser and estar in the blanks at the top.
2. Discuss with students the definition and significant characteristics of each concept as you record it. The discussion confirms that students have sufficient background to make the rest of the exercise meaningful.
3. Record phrases which express similarities on each HOW ALIKE line.
4. Record phrases which express differences on each HOW DIFFERENT line. Each difference between the two concepts should relate to the same quality, but should point out the difference between the two terms.
5. Ask students to explain the distinction between ser and estar and how they will be used differently.

Appendix W (continued)

CONCEPT 1 ser

CONCEPT 2 estar

HOW ALIKE?

both mean "to be"

both are verbs

HOW DIFFERENT?

	WITH REGARD TO	
occupation characteristics nationality origin permanent possessions	when used	health location emotions temporary conditions adjectives
soy somos eres sois es son	conjugations	estoy estamos estás estáis está están

Organizing Thinking, Book II

Critical Thinking Press + Software, 1990

Appendix X

Concept Map with Commands Lesson Plan

Graphic Organizer: Concept map

Purpose: To group command form verbs in to categories

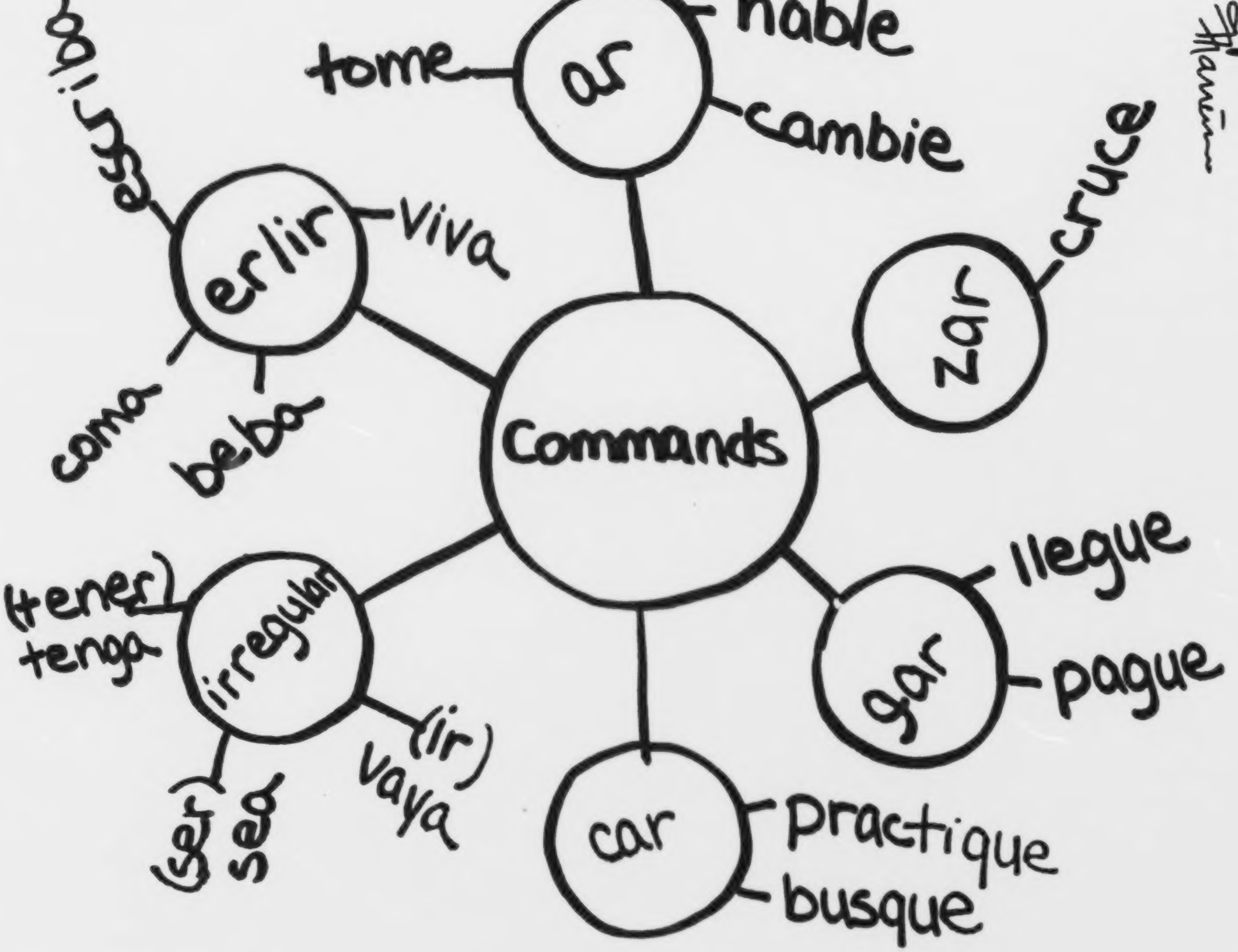
Thinking skill: Classification, categorization

Cooperative Groups: recorder, checker, time keeper

Lesson

1. Using Vocab List 3-8-2, students will take all verbs given in the command form and classify them. Students should be able to devise 6 categories.
2. Groups will share their maps with the class.
3. Students will brainstorm ways to apply this graphic organizer to previously learned content.
4. Students will process the social skills
    a. Did your recorder do a good job writing down your categories? How?
    b. Did your checker make sure your group came to consensus before you wrote down and answer?
    c. Did your time keeper keep your group on task and remind you of the time remaining?

Appendix X (continued)


Commands
ar
tome
hable
cambie
zar
cruce
gar
llegue
pague
car
practique
busque
irregular
(tener)
tenga
(ir)
vaya
(ser)
sea
er/ir
escriba
viva
coma
beba

Appendix Y

Christmas in Mexico Lesson Plan

La Navidad

Day 1

1. As a class complete the K (What we know) and the W (What we want to know) of the KWL chart on Christmas in Mexico.

2. Watch the video "Christmas in Mexico". Have students jot down key ideas from video on a sheet of paper. For homework, ask students to write down Holiday (Christmas) customs they have in their own home and religious background.

Day 2

1. As a class complete the L (What we learned) of the KWL chart.

2. In cooperative base groups round-robin holiday traditions particular to each student's household. This will allow students to experience a variety of ways to celebrate the holiday, enrich their own traditions and break down typical holiday stereotypes.

3. As individuals, students will use a Venn Diagram to compare/contrast Holiday (Christmas) customs in their home to Christmas customs in Mexico.

4. Students will complete two of the following stems for individual processing.

I feel...

I now know...

It was interesting...

I was surprised...

I'm sure...

I never thought...

I realized...

La Navidad

En mi casa

santa clause
Christmas - 25 Dec.
decorate houses
stockings

family
the candles
sing
trees
activity
scenes
mass
food
not coco

En mexico

three wise men
pointsettas
acting the birth
sparklers piñatas
wise men plays
Christmas - 24 Dec.
fireworks, bells
presents - 26 Jan.
take figures to church to be blessed